

**CLASS 252, COMPOSITIONS****SECTION I - CLASS DEFINITION**

(A) Compositions of matter, having or not having structure, physical form or heterogeneous arrangement of components and for which there is no provision elsewhere.

(B) Packages of such compositions, or other articles which include such compositions for which there is no provision elsewhere.

(C) Processes of making, or peculiar to making, such compositions and for which there is no provision elsewhere.

(D) Apparatus for use in or peculiar to such processes and for which there is no provision elsewhere.

- (1) Note. In this class each composition, the processes that are peculiar to making the same, and apparatus that is peculiar to such processes, are classified on the whole composition and its complete, or primary, function or quality, and such processes and apparatus are classified on or with the corresponding composition, unless otherwise indicated.
- (2) Note. Elements other than C and H and compounds which contain such other elements are not considered to be significant in this class when they originate in and form a part of petroleum, or fractions thereof, unless such elements or compounds are separately recited in the claims.
- (3) Note. The term "metal" as used in this class includes As, Sb, Bi, but not B, Si, Se, or Te. The terms "carboxyl" and "carboxylic", as used in this class, refer to the radical - COO-.

**SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS****A. LINE BETWEEN THIS CLASS, SUBCLASSES 380+ AND THE COMPOUND, ETC., CLASSES**

Compositions that recite a chemical compound or element in combination with an agent or agents whose sole purpose is to prevent chemical or physical change (e.g.,

cooking) in the compound or element, or to prevent corrosion by the compound or element, are classified with the compound or element. Processes of preparing such compositions, and processes of thus preserving the compound or element or preventing corrosion by the compound or element are also classified with said compound or element.

Class 252, subclasses 380+ take (1) old compounds limited to use as preserving agents, and (2) the combination of a preserving agent with a substance preserved wherein said substance preserved is so broadly claimed as not to afford a basis of classification, e.g., "an organic substance."

**B. COMPOSITION CLASS SUPERIORITY**

The rules for determining class placement of the original reference (OR) for claimed chemical compositions are as follows.

When all claims are in the same main class (i.e., a class and the classes that are an integral part therein are a single main class), placement of the OR is determined by the first occurrence in that main class schedule.

Placement of the OR when claims are classified in different main classes is controlled by the most comprehensive claim. When there are two or more claims that are equally most comprehensive and said claims are classified in different main classes, class placement of the OR is determined among said claims by first occurrence in the hierarchy set forth below in the ORDER OF SUPERIORITY FOR COMPOSITION CLASSES. Class 252, subclass 1, MISCELLANEOUS, is the residual placement subclass for claimed compositions whether or not of any special use, property, or function, not provided for elsewhere in the US Patent Classification System.

For purposes of determining class placement of the OR, a composition claim is either (1) classifiable per se, i.e., recites in the claim a special use, property, or function which is provided for by the title and definition of a class or subclass; or (2) not classifiable without recourse to the specification, i.e., does not recite in the claim a special use, property, or function provided for by the title and definition of a class or subclass.

If one or more composition claims are classifiable without said recourse to the specification, such claim or claims will control OR placement according to the first occurrence in the hierarchy set forth below in the ORDER OF SUPERIORITY FOR COMPOSITION

**CLASSES.** Any claims for which said recourse is necessary will be placed as cross-references on the basis of the classification determined by recourse to the specification. The exception to this placement rule is that, if the definition of a class or subclass explicitly provides for “solely disclosed” subject matter (usually a special use) of that class or subclass, class placement of the OR is that class or subclass if there is “solely disclosed” class or subclass subject matter. Examples of classes which provide for “solely disclosed” subject matter include Classes 424, 426, 508 and 510.

Examples of classes and subclasses which provide for compositions without a special use basis include Classes 106, 208, 252/363.5, 252/367.1, 252/372+, 252/378, 420, 501, 516, 520, 530, and 585. In the case of one or more composition claims classifiable in such a class or subclass, class placement of the OR is determined by first occurrence in the hierarchy set forth below in the **ORDER OF SUPERIORITY FOR COMPOSITION CLASSES** for claims classifiable without recourse to the specification for disclosed special use/s.

If **ALL** composition claims are not classifiable without said recourse to the specification, then each unclaimed disclosed special use, property, or function will be treated as though recited in a separate claim and Class placement of the OR is determined by first occurrence in the hierarchy set forth below in the **ORDER OF SUPERIORITY FOR COMPOSITION CLASSES**.

Any explicit statement of a class line or relationship between classes, set forth in a class (or subclass) definition or note, will be followed even if in conflict with the hierarchy set forth below in the **ORDER OF SUPERIORITY FOR COMPOSITION CLASSES**.

#### **ORDER OF SUPERIORITY FOR COMPOSITION CLASSES**

504, Plant Protecting and Regulating Compositions.

424, Drug, Bio-Affecting and Body Treating Compositions.

514, Drug, Bio-Affecting and Body Treating Compositions (integral part of Class 424).

426, Food or Edible Material: Processes, Compositions, and Products.

71, Chemistry: Fertilizers.

435, Chemistry: Molecular Biology and Microbiology.

436, Chemistry: Analytical and Immunological Testing, subclasses 500 through 548, in the schedule order.

505, Superconductor Technology: Apparatus, Material, Process, subclasses 100+.

149, Explosive and Thermic Compositions or Charges.

430, Radiation Imagery Chemistry: Process, Composition, or Product Thereof.

508, Solid Antifriction Devices, Materials Therefor, Lubricant and Separant Compositions for Moving Solid Surfaces, and Miscellaneous Mineral Oil Compositions (integral part of Class 252).

44, Fuel and Related Compositions.

148, Metal Treatment, subclasses 22+.

252, Compositions, subclasses 2 through 611, in the schedule order.

507, Earth Boring, Well Treating, and Oil Field Chemistry (integral part of Class 252).

252, Compositions, subclasses 8.57 through 88.2, in the schedule order.

510, Cleaning Compositions for Solid Surfaces, Auxiliary Compositions Therefor, or Processes of Preparing the Compositions (integral part of Class 252).

252, Compositions, subclasses 175 through 194, in the schedule order.

502, Catalyst, Solid Sorbent, or Support Therefor: Product or Process of Making (integral part of Class 252).

252, Compositions, subclass 478 through 407, in the schedule order.

436, Chemistry: Analytical and Immunological Testing, subclasses 1 through 183, in the schedule order.

252, Compositions, subclass 408.1 through the end of the schedule (except Class 516, or subclasses 363.5, 367.1, 372+, or 378, for which see below).

8, Bleaching and Dyeing; Fluid Treatment and Chemical Modification of Textiles and Fibers.

429, Chemistry: Electrical Current Producing Apparatus, Product and Process.

205, Electrolysis: Processes, Compositions Used therein, and Methods of Preparing the Compositions (integral part of Class 204).

204, Chemistry: Electrical and Wave Energy.

106, Compositions: Coating or Plastic, subclasses 1.05 through 38.9, in the schedule order.

501, Compositions: Ceramic.

106, Compositions: Coating or Plastic, subclasses 600 through 316, in the schedule order.

51, Abrasive Tool Making Process, Material, or Composition.

75, Specialized Metallurgical Processes, Compositions for Use Therein, Consolidated Metal Powder Compositions, and Loose Metal Particulate Mixtures, subclasses 300+.

420, Alloys or Metallic Composition.

148, Metal Treatment, subclasses 400+.

520, Synthetic Resins or Natural Rubbers,

530, Chemistry: Natural Resins or Derivatives; Peptides or Proteins; Lignins or Reaction Products Thereof, subclasses 200+ and 500+.

208, Mineral Oils: Processes and Products.

512, Perfume Compositions.

516, Colloid Systems and Wetting Agents; Subcombinations Thereof; Processes of Making, Stabilizing, Breaking, or Inhibiting (integral part of Class 252).

252, Compositions, subclasses 363.5, 367.1, 372+, and 378.

423, Chemistry of Inorganic Compounds, subclasses 265+.

585, Chemistry of Hydrocarbon Compounds (see the mixture subclasses).

252, Compositions, subclass 1 residual location for unprovided compositions.

This superiority list is not necessarily a complete list and will be amended as the relationship between other Classes containing compositions and the above listed Classes is determined.

#### C. LINES FOR PARTICULAR CLASS 252 SUB-CLASS AREAS.

##### 1. Lines Pertinent to Subclasses 62.51+

###### a. Lines With Class 148, Metal Treatment:

Subclasses 62.51+ take processes of preparing magnetic compositions and the compositions resulting therefrom, as well as such processes followed by a magnetizing and/or broad molding step. Subclasses 62.51+ also take any combination of the aforementioned steps with a heat-treating operation, except where the heat treatment modifies a magnetic property of a metallic component which is intentionally present in the composition, in which case the process is classified in Class 148.

Class 148, subclasses 100 through 122 take processes for altering the magnetic properties of materials having at least one component which is a free metal or alloy, except as indicated in the (2) Note in Class 148, subclass 100. Subclasses 300+ in Class 148 provide for stock resulting from such processes.

Dust cores made from a Class 252 component, but containing an intentionally included metallic component, whose magnetic properties have been modified by heat treatment, are provided for in one of said subclasses 300+.

###### b. Lines With Classes 29, Metal Working and 264, Plastic and Nonmetallic Article Shaping or Treating: Processes:

Class 29 provides for making magnets or cores for electromagnets from comminuted materials, including from mixtures of nonmetallic plastic materials and comminuted metals or magnetic nonmetals. Subclasses 602.1+ of Class 29 provide for methods of manufacturing magnets from nonmetallic materials which recite some step in addition to one or more of the following: making the composition, molding, heat treatment, and magnetizing. Processes restricted to any or all of the four named operations are classified in this subclass, 62.51+, of

Class 252, except if significant molding steps are recited.

If significant molding steps are recited, the process is classified in appropriate subclasses of Class 264, particularly subclasses 61, 104+, and 272. Class 264 provides for working, shaping, or molding of plastic materials which may be disclosed to be a magnetic compositions. See the Class Definition of Class 264 for the general lines between Class 264 and the composition classes.

c. Lines with Class 210, Liquid Purification or Separation:

Class 210 is the locus for the separating or purification of a liquid, generally claimed and for the separation, purification, or treatment of water, specifically. Class 252 in the locus for the resolution of colloids and will take the separation of liquids, generally claimed, by breaking an emulsion and including ancillary steps as decanting or passing through a separatory funnel, etc. Class 210 will take (a) a step of emulsion breaking of liquids generally claimed, combined with the separation of a diverse component (unless also by emulsion breaking), or (b) a step of emulsion breaking, per se, for the purpose of obtaining water. The water may be intended for use of for disposal.

d. Lines with Classes 106, Compositions: Coating or Plastic and 520, Synthetic Resins or Natural Rubbers:

Thus a composition which would otherwise be classified in Class 106, or in the Class 520 series would be classified herein if it is claimed as being electrically conductive or emissive or is so disclosed and the claims are generic as to the composition. As to methods of preparing the composition or device, this and indented subclasses will take those methods ordinarily classified in Class 106 within the limits set forth in section IV and (4) Note of the class definition of Class 106. The same limitations apply as between these subclasses and Class 260.

e. Lines with Class 250, Radiant Energy :

The line between Class 250 and this and indented subclasses is that Class 250 takes radioactive compositions combined with apparatus (structure); whereas Class 252, subclasses 625+ are limited to compositions, per se, or devices (structure) defined only in terms of their composition.

The line between Class 250 and Class 252, subclasses 625+, is that Class 250 takes radioactive compositions

combined with apparatus (structure); Class 252, subclasses 625+, on the other hand, is limited to compositions, per se, or devices (structure) defined only in terms of their compositions.

### SECTION III - SUBCLASS REFERENCES TO THE CURRENT CLASS

SEE OR SEARCH THIS CLASS, SUBCLASS:

61, 175, 179, 193, 319, 410, and 427 for Search Class references to Liquid Purification or Separation, for separation processes and apparatus there provided for.

### SECTION IV - REFERENCES TO OTHER CLASSES

SEE OR SEARCH CLASS:

- 8, Bleaching and Dyeing; Fluid Treatment and Chemical Modification of Textiles and Fibers, see the main class definition for the compositions classified therein.
- 15, Brushing, Scrubbing, and General Cleaning, for dust cloths, mops or other cleaning devices which include detergents.
- 44, Fuel and Related Compositions, appropriate subclasses for a solid or gelled composition to be used either as a fuel or as a carbonaceous reductant in a metallurgical process, subclass 643 for a match scratcher composition or structure, subclasses 640, 641 or 642 for a composition which, when present with a burning solid fuel retards or removes wall deposits, improve the combustion properties of the fuel or colors the flames, respectively, and subclasses 300+ for liquid fuel.
- 48, Gas: Heating and Illuminating, for gaseous compositions for heating or illuminating by combustion.
- 51, Abrasive Tool Making Process, Material, or Composition, for a composition for grinding, polishing, or abrading.
- 60, Power Plants, see class definition, search note to this class for the line between Class 60 and this class.
- 62, Refrigeration, see class definition, search note to Class 252, Compositions, for the line.
- 71, Chemistry: Fertilizers, for a plant fertilizing composition.
- 75, Specialized Metallurgical Processes, Compositions for Use Therein, Consolidated Metal

- Powder Compositions, and Loose Metal Particulate Mixtures, for processes of obtaining free metals from metal compounds, ores, or mixtures, or preparing materials for such processes, or compositions for use in such processes, and for alloys and other compositions having a continuous phase of free metal, e.g., made from metal powder.
- 99, Foods and Beverages: Apparatus, for apparatus for making food compositions.
- 106, Compositions: Coating or Plastic, for coating or plastic compositions and materials or ingredients used in the making of coating or plastic compositions which are not elsewhere classified. See References To Other Classes in Class 106 for coating or plastic compositions classified in classes other than those in Class 106. In particular, see the reference to Class 252 for the line between Classes 106 and 252.
- 117, Single-Crystal, Oriented-Crystal, and Epitaxy Growth Processes; Non-Coating Apparatus Therefor, for processes and non-coating apparatus for growing therein-defined single-crystal of all types of materials, including inorganic or organic.
- 127, Sugar, Starch, and Carbohydrates, for processes and apparatus for refining and manufacturing sugar, starch and carbohydrates and for the products produced.
- 131, Tobacco, for tobacco compositions and tobacco substitute compositions.
- 134, Cleaning and Liquid Contact With Solids, for washing or cleaning processes, which include use of detergents, or apparatus therefor or for contacting liquids with solids.
- 148, Metal Treatment, for soldering or other fluxing compositions, compositions for use in tempering or otherwise modifying solid metal.
- 149, Explosive and Thermic Compositions or Charges, for explosive and thermic compositions where the latter are used to produce usable heat or flame and by-products resulting from the use of such compositions.
- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, Class 252 provides for etching agents, per se, and for single crystal compositions within the class definitions, especially subclass 62.3 for barrier layer compositions.
- 162, Paper Making and Fiber Liberation, appropriate subclasses, for chemical processes of liberating cellulose and other fibers from fibrous materials, for processes of making paper by depositing fibers from a liquid suspension and for compositions employed in such processes.
- 166, Wells, subclasses 244.1+ for processes of treating or operating a well. See the Notes and Search Class references therein.
- 169, Fire Extinguishers, for fire extinguishing processes.
- 184, Lubrication, for lubricating devices and processes.
- 201, Distillation: Processes, Thermolytic, appropriate subclasses, for a carbonizing process and subclasses 20, 21+ and 25 for special carbonaceous compositions used in thermolytic distillation.
- 202, Distillation: Apparatus, appropriate subclasses for apparatus for making or reactivating solid carbonaceous sorbents.
- 203, Distillation: Processes, Separatory, appropriate subclasses for a distillation process not otherwise provided for.
- 204, Chemistry: Electrical and Wave Energy, for processes involving electrolysis, producing chemical changes by use of electrical or wave energy, involving electrophoresis or electro-osmosis, or electrical separation or purification of liquids including emulsion breaking and resolving other colloid systems. Compositions which are the result of a wave energy process are classified with the art use of said composition.
- 208, Mineral Oils: Processes and Products, for processes of cracking, distilling, purifying or otherwise treating mineral oils or tars or the products of such processes including lubricants, heat-exchange hydraulic and dielectric or electrical resistance compositions that are purely mineral oil or tar products, or mixtures thereof without any added specifically recited chemical compound or element.
- 216, Etching a Substrate: Processes, for etching processes.
- 239, Fluid Sprinkling, Spraying, and Diffusing, for processes or apparatus for dispersing liquid gases, especially subclasses 8, 9, 337+, and 398+.
- 260, Chemistry of Carbon Compounds, for compositions containing a natural rubber and for an organic compound, or a composition of an organic compound and an agent for inhibiting caking of, corrosion by chemical decomposition of, or other chemical changes of, the carbon compound, or processes of so preserving such compounds.













































































































































