BODY MEMBER PRINTING (E.G., FINGERPRINTING, ETC.)

MEDICAL OR DENTAL PURPOSE PRODUCT; PARTS; SUBCOMBINATIONS; INTERMEDIATES (E.G., BALLOON CATHETER, SPLINT)

Analysis, diagnosis, measuring, or testing product (e.g., specimen preparation, microscope slide smearing)

For contacting living body or transfusing bodily fluid (e.g., endoscope, electrode, thermometer, probe)

Layer formed contains chemical reagent or chemically reacts with substrate (e.g., cell stain or fix, pH paper, immobilized antigen)

Particulate or unit-dosage-article base (e.g., tablet, pill, pellet, capsule, liposome, powder, controlled-release implant, suppository; excluding transdermal patch)

Fluidized bed utilized

Retarded or controlled-release layer produced (e.g., enteric)

Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

En masse rotating means employed (e.g., rotating pan, tumbling)

Retarded or controlled-release layer produced (e.g., enteric)

Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

Retarded or controlled-release layer produced (e.g., enteric)

Gelatin matrix layer produced

Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

Implantable permanent prosthesis (i.e., artificial body member) (e.g., pacemaker, lens, cornea, glaucoma shunt, heart valve, muscle, spinal disc, breast, internal organ)

Liquid conveying (e.g., vascular, arterial, bile duct, urethra)

For mineralized body part (e.g., bone, tooth, crown, hip)

Inorganic oxygen-containing compound containing layer formed (e.g., hydroxyapatite, ceramic, glass)

Device for creating or holding open an unnatural opening in a membrane or organ (e.g., syringe, scalpel, drainage tube)

Dental product (e.g., floss, denture, orthodontia wire)

Fluid barrier or fluid transporting product, other than merely absorbing (e.g., surgical glove, condom, lined diaper, membrane filter, IV tubing, cannula, dialysis membrane, urinary catheter)

Flexible web, sheet, film, or filament base (e.g., fabric, bandage, suture, transdermal patch, orthopedic cast tape)

PLANT MEMBER OR ANIMAL SPECIMEN COATING

RADIOACTIVE BASE OR COATING

Particles or nuclear reactor fuel elements coated

FRAUD OR TAMPER DETECTING MEASURING, TESTING, OR INDICATING

Thickness or uniformity of thickness determined

Electrical or optical

FRICTIONAL APPLICATION (I.E., RUBBING SOLID COATING MATERIAL ON BASE)

SPRAY COATING UTILIZING FLAME OR PLASMA HEAT (E.G., FLAME SPRAYING, ETC.)

Organic containing coating

Nonuniform or patterned coating
CLASS 427 COATING PROCESSES

Continuous feed solid coating material (e.g., wire, rod, or filament, etc.)

Inorganic carbon containing coating, not as steel (e.g., carbide, etc.)

Additionally containing nickel, cobalt, or iron as free metal or alloy

Silicon containing coating

Metal oxide containing coating

Superposed diverse or multilayer similar coatings applied

Metal or metal alloy coating

Aluminum, nickel, cobalt, or iron metal or alloy containing coating

DIRECT APPLICATION OF ELECTRICAL, MAGNETIC, WAVE, OR PARTICULATE ENERGY

Electrostatic charge, field, or force utilized

Fluidized bed utilized

Ionization or corona discharge utilized

Heating or fusing applied coating

Flock or fiber applied

Pile- or nap-type surface formed

Heating, drying, or cooling adhesive surface

Organic substrate specified (e.g., fabric, etc.)

Nonuniform or patterned coating (e.g., ink jet printing, etc.)

Edging or striping

Mask or stencil utilized

Coating material consists of charged particles (e.g., paint, pigment, dye, etc.)

Superposed diverse or multilayer similar coatings applied

Applying coatings to opposite sides of a substrate (excluding processes where all coating is by immersion)

Positioning, orientation, or application of nonsprayed, nonatomized coating material solely by electrostatic charge, field, or force

Inorganic substrate

Solid particles applied

Solid particles or atomized liquid applied

Inside hollow articles

Articles or substrates sequentially moved past atomizing source

Collection of off-target or fugitive coating material

Utilizing multiple spray sources (e.g., atomizers)

Movable atomizer or spray source (e.g., spray source or atomizer rotates, reciprocates, oscillates, etc.)

Rotatable base or support for substrate

Running or indefinite length substrate

Utilizing apparatus to atomize and electrostatically charge liquid coating material (e.g., charging electrode adjacent spray source, etc.)

Rotatable atomizer or spray source

Coating contains organic material

Inorganic substrate

Polymerization of coating utilizing direct application of electrical, magnetic, wave, or particulate energy (i.e., including cross-linking, curing, and hardening of organics)

Plasma initiated polymerization

Organosilicon containing coating

Fluorocarbon containing coating

Organic substrate

Multiple applications of identical radiation energy source to polymerize (e.g., pulse, flash, lamp, etc.)

Application of plural diverse energy sources to polymerize (e.g., electromagnetic wave plus resistance heat, ultraviolet wave plus infrared wave, etc.)
494..Gloss control (e.g., light scattering, etc.)
495..Polymerization involving the control of oxygen containing gas as an inhibitor (e.g., air, etc.)
496..High energy electromagnetic radiation or high energy particles utilized (e.g., gamma rays, X-rays, atomic particles, i.e., alpha rays, beta rays, electrons, etc.)
497...Vapor deposition utilized
498...Immersion, partial immersion, spraying, or spin coating utilized (e.g., dipping, etc.)
499....Natural cellulose substrate
500...Coating material includes colorant or pigment
501...Textile, fiber, or wire coated or impregnated
502...Magnetic recording medium formed
503...Organosilicon containing coating material
504...Nonuniform or patterned coating (e.g., mask, printing, etc.)
505...Coating is adhesive or intended to be made adhesive (e.g., release sheet or coating, etc.)
506...Benzene ring or nitrogen containing coating material
507....Styrene or carboxamide group containing coating material (e.g., urea, urethane, etc.)
508...Low energy electromagnetic radiation utilized (e.g., UV, visible, IR, microwave, radio wave, actinic, laser, etc.)
509...Vapor deposition utilized
510...Nonuniform or patterned coating (e.g., mask, printing, textured, etc.)
511....Printing ink utilized
512...Immersion, partial immersion, spraying, or spin coating utilized (e.g., dipping, etc.)
513...Textile or fiber coated or impregnated
514...Coating material includes colorant or pigment
515...Organosilicon containing coating material
516...Coating is adhesive or is intended to be made adhesive (e.g., release sheet or coating, etc.)
517...Coating includes specified rate affecting material
518....Inorganic substrate
519....Keto or aldehyde containing group is part of the rate affecting coating material (e.g., benzoin, benzophenone, acetaldehyde, etc.)
520...Benzene ring or nitrogen containing coating material
521...Radiation as heat source (e.g., radiant energy, etc.)
522...Resistance or induction heat-initiated polymerization
523...Ion plating or implantation
524..With simultaneous sputter etching of substrate
525..Organic material present in substrate, plating, or implanted layer
526...Nonuniform or patterned ion plating or ion implanting (e.g., mask, etc.)
527...Silicon present in substrate, plating, or implanted layer
528...Metal or metal alloy substrate
529...Metal or metal alloy plating or implanted material
530...Inorganic metal compound present in plating or implanted material (e.g., nitrides, carbides, borides, etc.)
531...Metal or metal alloy plating or implanted material
532...Pretreatment of substrate or post-treatment of coated substrate
533...Ionized gas utilized (e.g., electrically powered source, corona discharge, plasma, glow discharge, etc.)
534...Cleaning or removing part of substrate (e.g., etching with plasma, glow discharge, etc.)
535...Plasma (e.g., cold plasma, corona, glow discharge, etc.)
536....Organic substrate
537.....Metal containing coating
538.....Textile or fiber coated or impregnated
Oxygen containing atmosphere
Arc or electrical discharge
...Drying
...Infrared or radiant heating
...Induction or dielectric heating
...Organic coating containing material
...Resistance heating
...Metal or metal alloy containing coating
...Magnetic field or force utilized
...Magnetic recording medium or device formed
...Running length substrate
...Magnetizable powder, flakes, or particles utilized
...High energy electromagnetic radiation or high energy particles utilized (e.g., gamma ray, X-ray, atomic particle, i.e., alpha ray, beta ray, high energy electron, etc.)
...Nonuniform or patterned coating
...Low energy electromagnetic radiation (e.g., microwave, radio wave, IR, UV, visible, actinic, laser, etc.)
...Laser
...Nonuniform or patterned coating
.....Metal or metal alloy substrate
...Thermal processes (e.g., radiant heat, infrared, etc.)
...Ultraviolet light
...Fusing, curing, or annealing (e.g., ceramics, etc.)
...Sonic or ultrasonic (e.g., cleaning or removing material from substrate, etc.)
.Pretreatment of coating supply or source outside of primary deposition zone or off site
...Electric discharge (e.g., corona, glow discharge, etc.)
...Silicon containing coating material
...Metal, metal alloy, or metal oxide containing coating material
...Sonic or ultrasonic (e.g., vibratory energy, etc.)
Electron irradiation (e.g., e-beam evaporation, etc.)
...Silicon or metal oxide coating (e.g., glass, etc.)
...Silicon containing coating supply or source
...Silicon oxides or nitrides
Metal, metal alloy, or metal oxide coating
...Silicon containing coating material
Silicon or metal oxide coating
Silicon or semiconductor material containing coating
Silicon carbide
.Boron, nitrogen, or inorganic carbon containing coating
..Induction or dielectric heating
..Resistance heating
..Vapor deposition employing resistance heating of substrate or coating material
..Immersion or partial immersion
595 Electromagnetic or particulate radiation utilized (e.g., IR, UV, X-ray, gamma ray, actinic, microwave, radio wave, atomic particle; i.e., alpha ray, beta ray, electron, etc.)

596 Laser or electron beam (e.g., heat source, etc.)

597 Metal or metal alloy containing coating material applied

598 Magnetic field or force utilized

599 Magnetic recording medium or device formed

600 Sonic or ultrasonic

601 Immersion bath utilized

58 ELECTRICAL PRODUCT PRODUCED

59 Welding electrode

60 Post-treating with solid treating member

61 Metal coating or Group IIA metallic compound containing coating

62 Superconductor

63 Nonuniform coating

64 Fluorescent or phosphorescent base coating (e.g., cathode-ray tube, luminescent screen, etc.)

65 X-radiation properties

66 Electroluminescent lamp

67 Fluorescent lamp

68 Multicolor or mosaic (e.g., color T.V. tube, etc.)

69 Vapor deposition

70 Nonmetallic coating formed by vapor deposition

71 Particles applied

72 Rotating the base

73 Settling out of liquid

74 Photoelectric

75 Mosaic or nonuniform coating

76 Coating is selenium, tellurium, or compound thereof

77 Electron emissive or suppressive (excluding electrode for arc)

78 Vapor deposition or spraying

79 Condenser or capacitor

80 Electrolytic or barrier layer type

81 Vacuum or pressure utilized

96.1 Integrated circuit, printed circuit, or circuit board

96.2 Protective coating (e.g., encapsulating, etc.)

96.3 Electromagnetic wave energy shield (e.g., electromagnetic wave shield (EWS), etc.)

96.4 Conformal (e.g., thin film <.02mm thick, etc.)

96.5 Mechanical shock, stress, or physical damage absorbing or shielding (e.g., scratch or puncture-resistant coating, etc.)

96.6 Barrier to diffusion of specific fluid (e.g., silicone rubber, selectively permeable membrane which excludes water or moisture, etc.)

96.7 Using mist or aerosol

96.8 Vapor or gas deposition

96.9 Front and back of substrate coated (excluding processes where all coating is by immersion)

97.1 Multilayer

97.2 Coating hole wall

97.3 Nonuniform or patterned coating

97.4 With posttreatment of coating or coating material

97.5 Polymer deposited

97.6 With posttreatment of coating or coating material

97.7 Coating hole wall

97.8 With pretreatment of substrate

97.9 Immersion metal plating from solution (e.g., electroless plating, etc.)

98.1 Activating or catalyst pretreatment

98.2 With posttreatment of coating or coating material

98.3 Heating (e.g., curing, etc.)

98.4 Nonuniform or patterned coating

98.5 With pretreatment of substrate

98.6 With pretreatment of substrate

98.7 Swelling

98.8 Etching or roughening

98.9 Heating

99.1 Activating or catalyst pretreatment

99.2 With posttreatment of coating or coating material

99.3 Planarization

99.4 Polymer deposited

99.5 Immersion metal plating from solution (e.g., electroless plating, etc.)
CLASS 427 COATING PROCESSES

100. Piezoelectric properties
101. Resistor for current control (excludes heating element)
102. Nonuniform coating
103. Applying superposed diverse coatings or coating a coated base
104. Motor stator or core for winding
105. Hollow article
106. Glass (e.g., light bulb, etc.)
107. Vapor deposition
108. Transparent base
109. Vapor deposition
110. Spraying
111. Filament for lamp or tube
112. Carbon filament
113. Carbon base
114. Brushes
115. Fuel cell part
116. Coil or winding
117. Wire conductor
118. Applying superposed coatings or coating a coated base
119. Foam, cellular, or natural rubber coating
120. Heat utilized
121. Cellulosic or fibrous base (e.g., wood, paper, etc.)
122. Carbon coating
123. Metal coating
124. Vapor deposition or utilizing vacuum
125. Silver, gold, platinum, or palladium
126.1. Metallic compound coating
126.2. Glass or ceramic base or coating
126.3. Metal oxide, peroxide, or hydroxide coating
126.4. Metal is Al
126.5. Metal is Au, Ag, Pt, Pd, Ru, Rh, Os, Ir
126.6. Metal is Ni, Fe, or Co

MAGNETIC BASE OR COATING
127. Magnetic coating
128. With pretreatment of base
129. With post-treatment of coating or coating material
130. Applying superposed diverse coatings or coating a coated base
131. Metal coating
132. Mold coating
133. Sand mold

FLUORESCENT OR PHOSPHORESCENT COATING
134. Optical brightening
135. Incandescent mantle produced
136. Coating has X-ray, ultraviolet, or infrared properties
137. Transparency or translucency increased (e.g., making window envelopes, etc.)
138. Optical element produced

OPTICAL ELEMENT PRODUCED
139. Polarizer, windshield, optical fiber, projection screen, or retroreflector

COATING PAVEMENT OR THE EARTH (E.G., ROADMAKING, ETC.)
140. Stripping, marking, or increasing reflectivity
141. Asphalt, bitumen, oil, or tar containing coating

RESTORING OR REPAIRING
142. Carbon paper or inked ribbon
143. Metal article

STENCIL BLANK MAKING
144. Decal or embossing foil type (i.e., continuous film transfers)
145. Heat sensitive
146. Fluid releasable
147. Reactive components
148. Coating opposite sides or forming plural or nonuniform coats

LATENT IMAGE FORMED OR DEVELOPED TRANSFER OR COPY SHEET MAKING
149. Carbon paper type

REMOVABLE PROTECTIVE COATING APPLIED
150. Organic base
151. Metal base

FLUORESCENT OR PHOSPHORESCENT COATING
152. Optical brightening
153. Incandescent mantle produced
154. Coating has X-ray, ultraviolet, or infrared properties
155. Transparency or translucency increased (e.g., making window envelopes, etc.)
156. Optical element produced

OPTICAL ELEMENT PRODUCED
157. Polarizer, windshield, optical fiber, projection screen, or retroreflector
158. Optical fiber, rod, filament, or waveguide
159. Projection screen
160. Retroreflector (e.g., light reflecting small spherical beads, etc.)
161. Transparent base
162. Glass
163.1. Sand mold
167  ....Silicon compound coating  
   (e.g., quartz, etc.)  
168  ...Spraying  
169  ...Immersion  
170  DELUSTERING FABRIC OR YARN  
WITH STRETCHING OR TENSIONING  
171  .Running lengths  
172  ..Lateral stretching  
173  ..Particles or fibers applied  
174  ..Cord, thread, yarn, or wire  
175  ..Textile fabric  
176  WITH WINDING, BALLING, ROLLING,  
   OR COILING  
177  .Metal or glass base (e.g., wire,  
   etc.)  
178  .Paper or felt base  
179  SOLID PARTICLES OR FIBERS APPLIED  
180  .Interior or hollow article  
   coating  
181  ..Fluidized bed utilized  
182  ..Rotating the base  
183  ..Nonuniform speed or  
   nonrectilinear base motion  
184  ..Fluidized bed utilized  
185  ..Roofing produced  
186  ..With cutting  
187  ..Localized different areas  
   produced  
188  .Uniting particles to form  
   continuous coating with  
   nondiscernible particles  
189  ..Metallic compound particles  
190  ..Metal particles  
191  ...Aluminum, copper, or zinc  
   particles  
192  ..Vitrifiable particles  
193  ..Roller utilized  
194  ..Synthetic resin particles  
195  ..Plural direction application of  
   coating materials or  
   simultaneously applying  
   particles and binder from  
   different sources  
196  .Localized different areas  
   produced (e.g., printing,  
   etc.)  
197  ..Deforming the base or coating  
   or removing part of the  
   coating  
198  ..Silicon compound, metal, or  
   metallic compound containing  
   particles applied  
199  ..Flock or fibers applied  
200  ..Plural particulate materials  
   applied  
201  202  .Applying superposed diverse  
   coatings or coating a coated  
   base  
203  ..Coating over the applied  
   coating of particles  
204  ..Silicon compound containing  
   particles (e.g., sand, etc.)  
205  ..Metal or metallic compound  
   containing particles  
206  ..Flock or fibers applied  
207  .COATING REMAINS ADHESIVE OR IS  
   INTENDED TO BE MADE ADHESIVE  
208  .Application to opposite sides of  
   base  
208.2  .Heat sensitive adhesive  
208.4  .Pressure sensitive adhesive  
208.6  ..Nonuniform coating (e.g.,  
   perforated, etc.)  
208.8  ..Applying superposed diverse  
   coatings or coating a coated  
   base  
209  APPLICATION TO OPPOSITE SIDES OF  
   SHEET, WEB, OR STRIP  
(EXCLUDING PROCESSES WHERE ALL  
   COATING IS BY IMMERSION)  
210  .Nonuniform coating  
211  .Roller applicator utilized  
212  PARTICLES, FLAKES, OR GRANULES  
   COATED OR ENCAPSULATED  
213  .Fluidized bed utilized  
213.3  .Solid encapsulation process  
   utilizing an emulsion or  
   dispersion to form a solid- 
   walled microcapsule (includes  
   liposome)  
213.31  ..With post-treatment of  
   encapsulant or encapsulating  
   material (e.g., further  
   coating, hardening, etc.)  
213.32  ..Hardening  
213.33  ....Using crosslinking agent  
213.34  ..Solid-walled microcapsule  
   formed by in situ  
   polymerization  
213.35  ..Solid-walled microcapsule  
   formed from gelatin or  
   derivative thereof  
213.36  ..Solid-walled microcapsule  
   formed from preformed  
   synthetic polymer  
214  .Applying superposed diverse  
   coatings or coating a coated  
   base  
215  ..Inorganic base  
216  ..Metal base  

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CLASS 427 COATING PROCESSES

217 ..Metal coating
218 ..Pigment containing coating
219 ...Silicon compound containing coating
220 ..Organic coating
221 ...Resin, rubber, or hardenable oil containing coating
222 .Resin base

FLAME CONTACT
223 .After coating
224 .Metal coating

HEAT DECOMPOSITION OF APPLIED COATING OR BASE MATERIAL
225 .Base material decomposed or carbonized
226 .Coating decomposed to form carbide or coating carbonized
227 .Coating decomposed to form metal

INTERIOR OF HOLLOW ARTICLE COATING
228 .Rotating the article
229 ..Removing excess coating material
230 ..Spraying
231 ..Metal base
232 ..Removing excess coating material
233 ..Spraying
234 .Coating by vapor, gas, mist, or smoke
235 .Vacuum or pressure utilized
236 .Metal base

CENTRIFUGAL FORCE UTILIZED
237 .Metal coating
238 RUMBLING OR TUMBLING
239 FORAMINOUS PRODUCT PRODUCED
240 .Filter, sponge, or foam
241 .Microporous coating (e.g., vapor permeable, etc.)
242 ..Coagulating or jelling the coating
243 .Metal base

COATING BY VAPOR, GAS, OR SMOKE
244 .Carbon or carbide coating
245 .Chemical vapor infiltration (i.e., CVI) of porous base (e.g., fiber, fibrous web, etc.)
246 .Fiber or fibrous web or sheet base (e.g., strand, filament, fabric, cloth, etc.)
247 .Inorganic carbon base (e.g., graphite, etc.)
248 .Boron and carbon containing coating (e.g., boron carbide, etc.)

Graphite coating
249.6 ..Diamond-like carbon coating (i.e., DLC)
249.7 ..Diamond coating
249.8 ..Patterned or non-uniform coating
249.9 ..Hot filament utilized
249.10 ..Diamond seed crystals utilized
249.11 ..Tungsten containing base
249.12 ..Superposed coatings (i.e., layered)
249.13 ..Silicon and carbon containing coating (e.g., silicon carbide, etc.)
249.14 ..Inorganic carbon base (e.g., graphite, etc.)
249.15 ..Metal carbide containing coating
249.16 ..Chromium (Cr), molybdenum (Mo), or tungsten (W) metal carbide containing coating
249.17 ..Titanium (Ti), zirconium (Zr), or hafnium (Hf) metal carbide containing coating
249.18 ..Base includes an inorganic compound containing silicon or metal (e.g., glass, ceramic, brick, etc.)
249.19 ..Chemical vapor infiltration (i.e., CVI) of porous base (e.g., fiber, fibrous web, etc.)
249.20 ..Plural coatings applied utilizing vapor, gas, or smoke
249.21 ..Organic compound containing coating
249.22 ..Silicon containing coating
249.23 ..Metal oxide containing coating
249.24 ..Base includes inorganic metal containing compound
249.25 ..Iron compound containing base (e.g., ferric oxide, etc.)
255.23 Mixture of vapors or gases (e.g., deposition gas and inert gas, inert gas and reactive gas, two or more reactive gases, etc.) utilized
255.24 Fiber or fibrous web or sheet based (e.g., strand, filament, fabric, cloth, etc.)
255.25 Mixture contains liquid or solid particulate suspension
255.26 Coating formed by reaction of vaporous or gaseous mixture with a base (i.e., reactive coating of non-metal base)
255.27 Silicon containing coating
255.28 Coating formed from vaporous or gaseous phase reaction mixture (e.g., chemical vapor deposition, CVD, etc.)
255.29 Inorganic oxygen, sulfur, selenium, or tellurium (i.e., chalcogen) containing coating (e.g., phosphosilicate, silicon oxyxynitride, etc.)
255.31 Metal and chalcogen containing coating (e.g., metal oxide, metal sulfide, metal telluride, etc.)
255.32 Plural metal containing coating (e.g., indium oxide/tin oxide, titanium oxide/aluminum oxide, etc.)
255.33 Zinc (Zn), cadmium (Cd), or mercury (Hg), containing
255.34 Gallium (Ga), aluminum (Al), or indium (In) containing
255.35 Germanium (Ge), tin (Sn), or lead (Pb) containing
255.36 Titanium (Ti) or zirconium (Zr) containing
255.37 Silicon dioxide coating
255.38 Phosphorus or boron containing coating (e.g., aluminum boride, boron phosphide etc.)
255.39 Halogen or halogen compound containing reactant
255.391 Titanium compound containing coating (e.g., titanium carbotinidte, titanium nitride, etc.)
255.392 Tungsten compound containing coating (e.g., tungsten silicide, etc.)
255.393 Silicon containing coating
255.394 Nitrogen containing coating (e.g., metal nitride, etc.)
255.395 Inorganic coating
255.4 Base supplied constituent
255.5 Moving the base
255.6 Organic coating applied by vapor, gas, or smoke
255.7 Plural coatings applied by vapor, gas, or smoke

NONUNIFORM COATING

256 Wrinkled or crackled coating
257 Applying superposed diverse coatings or coating a coated base
258 Including a masking coating
259 Handheld brush or absorbent applicator utilized
260 Final coating nonuniform
261 Variegated surface produced (e.g., mottled, stippled, wood grained, etc.)
262 Marbleized
263 Deforming the base or coating or removing a portion of the coating
264 Plural nonuniform coatings
265 Glass or ceramic base
266 Variegated surface produced (e.g., mottled, stippled, wood grained, etc.)
267 Marbleized
268 Deforming the base or coating or removing a portion of the coating
269 Glass or ceramic base
270 Deforming the base or coating or removing a portion of the coating
271 Deforming the base or coating or removing a portion of the coating
272 Mask or stencil utilized
273 Fluid treating the coating (e.g., vapor treating, etc.)
274 Variegated surface produced (e.g., stippled, marbleized, mottled, wood grained, etc.)
275 Deforming the base
276 Simultaneously deforming the coating
277 Solid treating member contacts coating
278 Roller treating member
279 Vitreous coating
280 Variegated surface produced (e.g., mottled, wood grained, etc.)
281 Marbleized
282 Mask or stencil utilized

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Crystalization or precipitation coating

Edge or border coating

Paper or textile base

Stripping (i.e., forming stripes)

Metal, glass, or ceramic base

Paper or textile base

WITH CUTTING, HOLDING, SEVERING, OR ABRADING THE BASE

Prior to coating

Wood base (e.g., injecting, etc.)

Inorganic base

VACUUM UTILIZED PRIOR TO OR DURING COATING

Metal base

Organic base

Wood base

Creosote, wax, oil, asphalt, or bitumen coating

WITH PRETREATMENT OF THE BASE

Shielding or spacing

Preapplied reactant or reaction promoter or hardener (e.g., catalyst, etc.)

Resin, rubber, or hardenable oil containing coating

Cellulosic base

Metal coating (e.g., electroless deposition, etc.)

Nickel, copper, cobalt, or chromium coating

Organic base

Etching, swelling, or dissolving out part of the base

Cellulosic base

Inorganic base

Fluxing

Supernatant flux (floating)

Lead or tin coating

Lead or tin coating

Heating or drying pretreatment

Steam utilized

Organic base

Wood base

Metal base

Metal coating

Aluminum coating

Zinc or spelter coating (e.g., galvanizing, etc.)

Organic base

Natural protein containing base (e.g., silk, wool, leather, etc.)

Cellulosic base

Wood base

Paper base

Metal base

Metal coating

Molten metal bath utilized

Vitreous coating

WITH POST-TREATMENT OF COATING OR COATING MATERIAL

Deodorizing

Plural film forming coatings wherein one coating contains a chemical treating agent for the other

Oil or wax treatment of coating

Solvent vapor treatment of coating

Swelling agent or solvent applied to treat coating

Chemical agent applied to treat coating

Proteinaceous coating

Cellulosic coating

Resin, resin precursor, rubber, or hardenable oil containing coating

Inorganic treating agent

Textile or cellulosic base

Inorganic coating

Silicon compound containing coating

Coating material recirculation or regeneration

Movement of work treats coating (e.g., vibrating, tilting, etc.)

Metal coating

Gas jet or blast mechanically treats coating

Metal coating

Vacuum or reduced pressure utilized

Wood base

Liquid extraction of coating constituent or cleaning coating

With water

Drying subsequent to washing

Solid treating member or material contacts coating

Die, blade, or sharp-edged tool

Metal coating
358 ...Organic coating
359 ...Roller, drum, or cylinder
360 ...Metal coating
361 ...Paper base (e.g., calendering, etc.)
362 ...Cast coating
363 ...Wax or oil containing coating
364 ...Casein or starch containing coating
365 ...Treating between rollers (e.g., calendering, etc.)
366 ...With heating (e.g., heated roller, etc.)
367 ...Metal coating
368 ...Brushing
369 ...Pressure treatment of coating (e.g., squeezing, etc.)
370 ...With heating (e.g., hot ironing, etc.)
371 ...Organic base
372.2 Heating or drying (e.g., polymerizing, vulcanizing, curing, etc.)
373 ...Cells, foam, or bubbles formed
374.1 ...And cooling
374.2 ...Heating after cooling
374.3 ...Without intervening coating step
374.4 ...Fused or molten coating cooled
374.5 ...Liquid or solid cooling medium
374.6 ...Vacuum, vapor, or gas other than air utilized
374.7 ...Vitreous or glazed coating
375 ...Fusion or softening of coating
376.1 ...Inorganic coating
376.2 ...Metal oxide- or silicon-containing coating (e.g., glazed, vitreous enamel, etc.)
376.3 ...Metal-containing coating (e.g., cermet, etc.)
376.4 ...Metal base
376.5 ...Ferrous base
376.6 ...Metal-containing coating
376.7 ...Coating consists of metal
376.8 ...Metal base
377 ...Modified condition of atmosphere (e.g., steam, air movement, etc.)
378 ...Movement of atmosphere
379 ...Plural heating or drying steps
380 ...Metal or metallic compound containing coating
381 ...Textile or cellulosic base
382 ...Paper or natural cellulose base
383.1 ...Metal coating
383.3 ...Inorganic base
383.5 ...Fused oxide-containing base (e.g., ceramic, glass, etc.)
383.7 ...Metal base
384 ...Organic coating
385.5 ...Resin, resin precursor, rubber, or hardenable oil-containing coating
386 ...Epoxy or polyepoxide containing coating
387 ...Silicon compound containing coating
388.1 ...Metal base
388.2 ...Cross-linked or infusible coating
388.3 ...Aldehyde-containing precursor
388.4 ...Water-containing coating (i.e., aqueous dispersion, emulsion, or solution)
388.5 ...Nonaqueous dispersion
389 ...Proteinaceous base (e.g., wool, leather, etc.)
389.7 ...Glass base
389.8 ...Fiberglass base
389.9 ...Textile or cellulose base
391 ...Paper base
392 ...Natural cellulose base
393 ...Wood base
393.1 ...Antistatic properties increased
393.2 ...Wrinkle resistance of crease holding properties increased
393.3 ...Flame resistance increased
393.4 ...Antisoiling or water repellency increased
393.5 ...Resin, rubber, or elastomer base
393.6 ...Asbestos, ceramic, concrete, or masonry base
394 ...Textile or cellulosic base
395 ...Paper base
396 ...Natural cellulose base
397 ...Wood base
397.7 ...Inorganic silicon-containing coating
397.8 ...Alkalil silicate
398.1 ...Cooling
398.2 ...Utilizing solid member contacting base or coating (e.g., cooling roller, etc.)
CLASS 427 COATING PROCESSES

398.3 Liquid utilized (e.g., quenching, spraying, etc.)
398.4 Vacuum, vapor, or gas other than air utilized
398.5 Movement of atmosphere

BASE SUPPLIED CONSTITUENT
400 Resin or rubber base

401 COMBINED

APPLYING SUPERPOSED DIVERSE COATING OR COATING A COATED BASE
403 Settable inorganic coating (e.g., cement, etc.)
404 Metal coating
405 Metal base
406 Zinc coating
407.1 Synthetic resin coating
407.2 Glass base
407.3 Fiberglass base
408 Wood base
409 Metal base
410 Epoxy or polyepoxide containing coating
411 Paper base
412 Textile or leather base
412.1 Nonfibrous organic base
412.2 Cellulose derivative base
412.3 Polyolefin base
412.4 Halogen-containing resin base
412.5 Polyester or alkyd resin base
413 Natural rubber or derivative containing coating
414 Protein or derivative containing coating (e.g., casein, glue, gelatin, etc.)
415 Cellulosic coating
416 Wax containing coating
417 Natural resin, oil, or fat containing
418 Metal or derivative containing coating
419.1 Metallic compound-containing coating
419.2 Oxide-containing coating
419.3 Superposed diverse oxide coatings
419.4 Vitreous coating
419.5 Organic coating
419.6 Vitreous coating
419.7 Boride, carbide, nitride, phosphide, silicide, or sulfide-containing coating
419.8 Organometallic or metal salt of organic compound-containing coating

FALLING CURTAIN OF COATING MATERIAL UTILIZED (I.E., CURTAIN COATING)

SPRAYING
420
421.1 Spraying
422 Heated coating material
424 Moving the base
425 Rotating or inverting
426 Ingredients supplied separately
427 Inorganic coating material
427.1 Supported or guided by base (e.g., work, workpiece, etc.) during coating
427.2 With programmed control or using mechanized nozzle or projector (e.g., robotic sprayer, etc.)
427.3 Moving nozzle or projector
427.4 Polymer containing coating material
427.5 Metal base
427.6 Organic compound containing base
427.7 Organic compound containing base
428.01 ROLLER APPLICATOR UTILIZED (E.G., PADDING, ETC.)
428.02 Single roller applies plural layers of same coating material to base
428.03 Roller composed of three or more layers used
428.04 Tapered roller used
428.05 Fibrous or porous surface roller used
428.06 Grooved or textured surface roller used
428.07 Resilient (e.g., rubber, etc.) surface roller used
428.08 Plural roller applicators used
428.09 Opposed, counter, or reverse surface movement at contact between roller applicator and base
428.1 Including using roller backup support for base
428.11 Opposed, counter, or reverse surface movement at contact between roller applicator and base
428.12 And using transfer roller to feed coating material to roller applicator
428.13 And roller end dams used
428.14 And doctor or roller used to distribute coating material on roller applicator
428.15 ..And using transfer roller to feed coating material to roller applicator
428.16 ..And guiding base to follow surface curvature of roller applicator
428.17 ..Including using roller backup support for base
428.18 ..Including using force to supply coating material to roller applicator
428.19 ..Through nozzle or projector
428.2 .Direct contact of roller applicator with coating material supply bath used
428.21 ..Including using roller backup support for base

BRUSH OR ABSORBENT APPLICATOR UTILIZED
429

IMMERSION OR PARTIAL IMMERSON
430.1 .Molten metal or fused salt bath
432 ..Inert gas or nonoxidizing atmosphere utilized
433 ..Lead, zinc, or tin coating (e.g., galvanizing, etc.)
434.2 .Running lengths
434.3 ..Coating applied at surface of bath only
434.4 ..Base treated by solid member in bath (e.g., scraped, squeezed, etc.)
434.5 ..Coating material moved (e.g., agitated, circulated, etc.)
434.6 ..Cord, thread, yarn, wire, or rod
434.7 ..Extending through bath-containing wall
435 ..Metal base
436 ..Metal coating
437 ..Chemical compound reducing agent utilized (i.e., electroless deposition)
438 ....Nickel coating
439 ..Cellulosic base
440 ..Wood base
441 ....Creosote, wax, oil, asphalt, or bitumen containing coating
442 ....Wax, oil, asphalt, or bitumen containing coating
443 ....Wax, oil, asphalt, or bitumen containing coating
443.1 .Chemical compound reducing agent utilized (i.e., electroless deposition)
443.2 .Inorganic base

PRETREATMENT, PER SE, OR POST-TREATMENT, PER SE (WITHOUT CLAIMED COATING)
444

MISCELLANEOUS
445

CROSS-REFERENCE ART COLLECTIONS
900 CHEMICAL VAPOR INFILTRATION (I.E., CVI)
901 LIQUID SOURCE CHEMICAL DEPOSITION (I.E., LSCVD) OR AEROSOL CHEMICAL VAPOR DEPOSITION (I.E., ACVD)
903 FULLERENE TYPE BASE OR COATING
902 DIAMOND-LIKE CARBON COATING (I.E., DLC)
904 ..Utilizing low energy electromagnetic radiation (e.g., microwave, radio wave, IR, UV, visible, actinic laser, etc.)
905 ..Utilizing ion plating or ion implantation
906 ..Utilizing plasma (e.g., corona, glow discharge, cold plasma, etc.)

FOREIGN ART COLLECTIONS
FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

COATING BY VAPOR, GAS, OR SMOKE
FOR 100 .Carbon or carbide coating (427/249)
FOR 101 .Base includes inorganic silicon or metal containing compound (e.g., glass, ceramic, brick, etc.) (427/255)
Mixture of vapors or gases utilized (427/255.1)

The resultant coating is a mixture or a compound formed from the mixture utilized (427/255.2)

The mixture utilized contains oxygen (427/255.3)

ELECTRICAL PRODUCT PRODUCED (427/58)

Integrated circuit, printed circuit, or circuit board (427/96)

Coating hole walls (427/97)

Immersion metal plating from solution (e.g., electroless plating, etc.) (427/98)

Vapor deposition (427/99)

SPRAYING (427/421)

ROLLER APPLICATOR UTILIZED (E.G., PADDING, ETC.) (427/428)