1 **PROCESS DISINFECTING, PRESERVING, DEODORIZING, OR STERILIZING**
2 .Step of warning or decreasing hazard of process
3 .Process control in response to analysis
4 .A gas is substance acted upon
5 .Deodorizing
6 .Affecting structure, article, etc., submerged in marine environment
7 .Maintaining environment nondestructive to metal
8 ..Using protective article (e.g., antitarnish fabric, etc.)
9 ..Using gaseous preservative, preservative added to gaseous phase of environment, or maintaining gaseous phase nondestructive
10 ...Manipulating gaseous environment for preservative purpose
11 ...Steam environment
12 ..Aqueous acid environment (i.e.,pH less than or equal to 4.1)
13 ..Aqueous alkali environment (i.e., pH greater than or equal to 8.4)
14 ..Essentially pure water environment
15 ...Using organic compound having phosphorus
16 ...Using organic nitrogen compound other than ammonium salt
17 ...Using organic carboxylic acid or salt thereof
18 ...Using inorganic silicon or phosphorus compound
19 ...Using heavy metal or compound thereof
20 .Using sonic or ultrasonic energy
21 .Using microwave energy
22 .Using direct contact with electrical or electromagnetic radiation
23 ..In atmosphere other than air
24 ..Ultraviolet
25 .Including additional step of preventing damage to sealed container
26 .Using direct contact steam to disinfect or sterilize
27 ..And additional disinfecting or sterilizing agent
28 .Using disinfecting or sterilizing substance
29 ..In situ generation of agent other than aldehyde or glycol
30 ..And removing the agent by chemical reaction or sorption
31 ..And recovering or reusing the agent
32 ..Treating bulk material
33 ..With positive pressure or vacuum
34 ..Using alkylene oxide
35 ..Using cyanide
36 ..Using aldehyde
37 ..Using halogen or halogen-containing compound
38 .Using fluent heat transfer medium other than air
39 .By sudden release of pressure
40 .Process of storage or protection
41 ..Of liquid
42 ...By preventing evaporation
43 ....Of water
44 **BLOOD TREATING DEVICE FOR TRANSFUSIBLE BLOOD**
45 .Oxygenator
46 ..Including integral heat-exchange means
47 ..Bubble or foam producing
48 ..Membrane
49 **INCLUDING MEANS FACILITATING PART REPLACEMENT OR REPAIR OTHER THAN SOLID, EXTENDED SURFACE, FLUID CONTACT MEANS**
50 **ANALYZER, STRUCTURED INDICATOR, OR MANIPULATIVE LABORATORY DEVICE**
51 .Calorimeter
52 .Chemiluminescent
53 .Corrosion tester
54 .Flame ionization detector
400 .Structured visual or optical indicator, per se
401 ..In a holder or container
402 ...Structure to facilitate analysis of the results
403 ....Read by automated means
404 .....Registration of the structure within the analyzer

405 ...Tubular
406 ....Including a swab
407 ...Well plate
408 ...Structure for contacting the sample with the reagent
409 ....Envelope, packet or sleeve (e.g., for fecal occult sample, etc.)
410 ....Lancet (e.g., for finger prick, etc.)
411 ....Swab
412 ....Device using capillary action
413 ....Device having frangible compartment
414 ....Device having torturous path
415 ....Including centrifuge
416 ....Including means for facilitating reaction of a gaseous fluid
417 ....Including channel, valve or chamber
418 ....Wiping means to acquire solid test substance
419 ....Acquisition of liquid sample
420 ..Having reagent in absorbent or bibulous substrate
421 ...Plural layers
422 ....Filtering
423 ....Spreading
424 ....Support layer
425 ..Having coated reagent
426 ...Plural layers
427 ....Filtering layer
428 ....Spreading layer
429 ....Support layer
430 .Test package or kit
62 .Automatic analytical monitor and control of industrial process
63 .Sample mechanical transport means in or for automated analytical system
64 ..Means is turntable (circular)
65 ..Means is conveyor and rack
66 ..Means is moving tape or band
67 ..With specific analytical program control means
68.1 .Means for analyzing liquid or solid sample
69 ..Sorption testing
70 ...Liquid chromatography
71 ...With radioactive material
72 ..Including centrifuge
73 ..With coagulometer for agglutination, clotting, or prothrombin, or for particle (e.g., cell, etc.) counting, or volume or characteristics determination
74 ..Dairy tester
75 ..Including titrator
76 ...Conductiometric type
77 ....With integrating or differentiating means
78 ..Including means for pyrolysis, combustion, or oxidation
79 ...Biological, chemical, or total oxygen demand (i.e., BOD, COD, TOD)
80 ...And means directly analyzing evolved gas
81 ..Automated system with sample fluid pressure transport means
82 ...And means segmenting fluid material
82.01 ..Measuring electrical property
82.02 ...Resistance or conductivity
82.03 ...Ion selective electrode
82.04 ....Dissolved gas
82.05 ..Measuring optical property by using ultraviolet, infrared, or visible light
82.06 ...Optode or optrode
82.07 ....Fluorescence
82.08 ...Fluorescence
82.09 ...Absorbance or transmittance
82.11 ...Waveguides
82.12 ..Measuring temperature
82.13 ..Measuring pressure
83 .Means for analyzing gas sample
84 ..Breath tester
85 ...Based on color change
86 ..Including means reacting gas with color indicator
87 ...Strip indicator
88 ..Including means for adsorbing or absorbing gas into or onto liquid or solid media
89 ...Gas chromatography
90 ...With conductiometric detector
91 ...With photometric detector
92 ...With volumetric detector

93 ..Including means dividing sample stream into plural parallel segments having diverse treating means and the analytical result compared or combined
94 ..Combustible gas detector
95 ...With thermoelectric detector
96 ....Wheatstone bridge
97 .....With specific coating on bridge element
98 ..Analysis based on electrical measurement
500 .Miscellaneous laboratory apparatus and elements, per se
501 ..Volumetric fluid transfer means, e.g., pipette, pipettor, etc.)
502 ...Micro-fluidic device
503 ....Plate design or structure
504 ....Liquid moving means
505 .....Pump
506 .....Centrifugal force
507 .....Capillary action
508 ....Spray tip
509 ...Automated system
510 ....Including washing means
511 ....Including tip attachment or removal
512 ...Including seal penetration means
513 ...Including filter
514 ...Mixing of diverse substances within pipette
515 ...Sequential multidispensing from a single tip
516 ...Variable volume
517 ....Including liquid level sensor
518 .....Electrically operated
519 ...Interaction of dispensing tip with surface upon which fluid is dispensed
520 ...Drawing of liquid into pipette by capillary action
521 ...Dispensing means
522 ....Pressure
523 ....Gravity
524 ...Tip
525 ....Removable
526 .....Including storage rack therefore
527 ..Including means for separating a constituent (e.g., extraction, etc.)
528 ...Evaporator
529 ....Operated at ambient temperature
530 ....Heated
531 ...Condenser
532 ....Cooling means
533 ...Gravity or centrifuge separation
534 ...Filter
535 ....Porous media
536 ..Tissue processing device
537 ..Valve
538 ...Including connector
539 ...With multiple discrete settings
540 ...Stator and rotor, petcock/ stopcock, or slider
541 ...Check
542 ...Ball or seat
543 ...Gas
544 ..Connector
545 ...Terminal end threaded or tapered
546 ...For needle, syringe, or capillary tube
547 ..Container
548 ...Used with centrifuge equipment
549 ...Tube shaped vessel
550 ....Including closure or sealing mechanism
551 ...Plate, sheet, dish or tray
552 ....Including a plurality of wells or receptacles
553 .....Microtitration plate
554 ...Cartridge, cassette or cuvette
555 ...Bag type containers
556 ...Flask, bottle or beaker
557 ...Cup or crucible
558 ...Vial or ampoule
559 ...Including multiple internal compartments or baffles
560 ..Holder
561 ...For sample or specimen container
562 ....For tube
563 ....For slide
564 ....For burette, pipette, or pipette tip
565 ..Housing
566 ..Support
567 ..Hood
568 ..Stopper, cover, plug, or seal
569 ...Covering multiple containers or wells

570 ...Penetrable cover (e.g., septum, etc.)
105 **CONTROL ELEMENT RESPONSIVE TO A SENSED OPERATING CONDITION**
106 .Responsive to liquid level
107 .Control element directly mechanically linked to separate sensor
108 .Control element responds proportionally to a variable signal from a sensor
109 ..Controls heat transfer
110 ..Controls flow rate of a material to or from a contact zone
111 ...Material is an input to contact zone
112 .Control element is fluid pressure sensitive
113 ..Pressure-relief valve (e.g., pop-off valve) or check valve
114 .Control element is a binary responsive valve
115 ..Valve diverts flow from a contact zone
116 .Sensed condition is operating time and control is operation sequencer
117 **WITH SAFETY FEATURE**
118 .Preventing opening of closure of pressurized apparatus at unsafe pressure
119 **WITH INDICATING, SIGNALLING, RECORDING, SAMPLING, OR INSPECTION MEANS**
120 **FOR DEODORIZING OF, OR CHEMICAL PURIFICATION OF, OR GENERATION OF, LIFE-SUSTAINING ENVIRONMENTAL GAS**
121 .With means exposing gas to electromagnetic wave energy or corpuscular radiation
122 .Including solid, extended surface, fluid contact reaction means (e.g., Raschig rings, particulate or monolithic catalyst, etc.)
123 .Including means adding material into environmental gas
124 ..And mechanical means creating forced draft at addition site
125 ..With material-heating means
126 ...Material is combusted
127 **SHOCK OR SOUND WAVE**
128 .Including supersonic or ultrasonic energy generation means
129 **CHEMICAL REACTOR**
129.1 .Soap making
130 .Bench scale
131 .Organic polymerization
132 ..Closed loop
133 ..Generating foamed plastic
134 ..Including plural sequential reaction stages
135 ..Including reactant agitating means in reaction chamber
136 ...And means rotatably mounting reaction chamber
137 ...Horizontal reaction chamber with screw or worm agitator
138 ..With heat exchanger for reaction chamber or reactants located therein
139 .Fluidized bed
140 ..With liquid present
141 ..Plural reaction beds
142 ...Sequentially arranged
143 ..Including specific wind box or particulate matter support grid
144 ..Including means to strip reaction mass from, or to regenerate, the particulate matter (including fluidized bed regenerators, per se)
145 ..And means providing flow of particulate matter into or out of reaction chamber
146 ..With heat exchange means affecting reaction chamber or reactants located therein
147 ..And means mechanically separating and removing particulate bed material from fluid effluent
148 .Ammonia synthesizer
149 .With means simultaneously carrying out conjugated reactions within single reactor
150 .Pigment or carbon black producer
151 ..With means injecting quench stream into reaction chamber downstream of reaction site
152 ..With particulate product collecting surface and means mechanically removing product therefrom

153 ...Moving collecting surface
154 ....Rotary collecting surface
155 .....Disk or plate
156 ..With plural sequential reaction zones or chambers
157 ...With movably or removably mounted plug means for converting reactor from (N) to (N+1) reaction stages
158 ..Vapor phase reaction type
159 .For radioactive reactant or product
160 .Inorganic sulfur acid or anhydride producing type
161 ..Acid is final product
162 .Inorganic hydrator
163 .Explosives synthesizer
164 .Solid reactant type (i.e., absence of fluid reactants)
165 ..Including ignition means for reactant
166 ...Electrically actuated
167 ..Including reactor cooling means surrounding reactor
168 .Waste gas purifier
169 ..Including means providing sequential purification stages
170 ...Plural chemical reaction stages
171 ....Solid, extended surface, fluid contact type
172 ....And means downstream of a stage for injecting a reactant into waste gas for interreaction in subsequent stage
173 ..With heat exchanger for reaction chamber or reactants located therein
174 ...Electrical type
175 ...Regenerative heat sink
176 ..Including waste gas flow distributor upstream of reaction site and within reaction chamber modifying velocity profile of gas
177 ..Including solid, extended surface, fluid contact reaction means; e.g., inert Raschig rings, particulate absorbent, particulate or monolithic catalyst, etc.
178 ...And contact regenerating means or means for cleaning an internal surface of the reaction chamber
179 ...Fixed bed with resilient or differential thermal expansion compensating bed support means
180 ...Unitary (i.e., nonparticulate) contact bed (e.g., monolithic catalyst bed, etc.)
181 ...Fixed annularly shaped bed of contact material and means directing gas therethrough substantially perpendicular to longitudinal axis of bed
182 ..Including means injecting combustion fuel into reaction chamber in direct contact with waste gas
183 ...And means mixing combustion fuel with waste gas upstream of reaction site
184.1 .For chemically destroying or disintegrating solid waste, other than burning alone
185 .For chemical recovery of chemicals from waste paper making liquor
186 .With means applying electromagnetic wave energy or corpuscular radiation to reactants for initiating or perfecting chemical reaction
186.01 ..Magnetic
186.02 ...Object protection
186.03 ...With electrical discharge
186.04 ..Electrostatic field or electrical discharge
186.05 ...Treating surface of solid substrate
186.06 ....Surface is metal
186.07 ...Ozonizers
186.08 ....With preparatory or product-treating means
186.09 .....With drying means
186.1 .....With filtering or particle removal means
186.11 .....With cooling, compression, condensation, or liquefying means
186.12 ....With subsequent use means
186.13 ....With electrode moving means
186.14 ....With fluent reactant flow control means

186.15 ....With current control or special electrical supply means
186.16 .....With pulse generating means
186.18 ....Cylindrical electrode
186.19 .....With heating or cooling means
186.2 ....With heating or cooling means
186.21 ...Arc or spark discharge means
186.22 ....With electrode or reaction space heating or cooling means
186.23 ....With preparatory or product-treating means
186.24 .....With nitrogen fixation means
186.25 .....With cooling or pressurizing means
186.26 ....With electrode moving means
186.27 .....With current control means
186.28 ....With current control means
186.29 ...With RF input means
186.3 ..With ultraviolet radiation generating means
187 .Combined
600 .Including plural reaction stages
601 ..Including plural parallel reaction stages with each stage in the form of a plate
602 ..Plate-type laminated reactor
603 ..Microscale reactor
604 ..With gas contact means for degassing or agitating (e.g., sparging, etc.)
605 ..With draft tube
606 ..With multiphase mixing means
607 ..With distributor or collection tray
608 ..With separation or purification means (e.g., rectification, evaporation, ion exchanger, extraction, settler, absorption, recrystallization, etc.)
609 ...Stripper tower
610 ...Distillation means (e.g., retort, etc.)
611 ...Scrubbing
612 ...Absorption
613 ...Cyclone separator
614 ...Condenser
615 ....Condenser downstream of a heat exchanging means
616 ...Filtering means
617 ....Membrane separation (e.g., palladium membrane hydrogen purifier, etc.)
618 ...Including product separation or purification means
619 ..Combined with contact material regenerating means (e.g., regenerating catalyst, etc.)
620 ..Combined with recycling means (e.g., recycling products, reactants, etc.)
621 ...Including reaction heat recovery or recycling
622 ...Including external recycle loop
623 ..Including a boiler
624 ..Including a mechanical means for transportation of material (e.g., conveyor, turntable, truck, etc.)
625 ..Including reformer reactor
626 ...Including water gas shift reaction
627 ...Combined with selective or preferential oxidation reactor
628 ...Autothermal
629 ...Steam reformer
630 ..Discrete sequential reaction stages
631 ...Plural solid, extended surface, fluid contact reaction stages (e.g., inert Raschig rings, particulate sorbent, particulate or monolithic catalyst, etc.)
632 ....With down-flow fixed bed
633 ....Including a unitary, monolithic catalyst bed
634 ....With metal catalyst (e.g., metal oxide, etc.)
635 ....Including random inert packing (e.g., Raschig rings, balls, saddle rings, etc.)
636 ....At least one reaction stage formed of a fixed, annularly shaped bed of contact material
637 .....With means for directing reaction stream therethrough substantially perpendicular to the longitudinal axis of the bed
638 ....Superimposed reaction stages in single reaction chamber
639 ...Wherein at least one reaction stage is upstream or downstream of parallel stages (e.g., AA-B, etc.)

640 ...With parallel repeat of a sequence of reaction stages (e.g., AB-AB, etc.)
641 ...With each stage in the form of a reaction tube
642 ...Wherein the reaction stages are the same
643 ...Including thermal combustion means
644 ...Reaction stages located within single reaction chamber
645 ....With baffle (i.e., deflector plate)
646 ....With heating or cooling means
647 ....And means downstream of a stage for internally injecting a reactant into a reaction stream for reaction in a subsequent stage, or injecting an internal quench stream into a reaction stream passing between stages
648 ....Means within reaction chamber for redistributing reaction stream as it passes between adjacent stages
649 ...With the provision of heating or cooling means
650 ..Including plural parallel reaction stages with each stage in the form of a reaction tube
651 ...Tubular stages in a single reaction chamber
652 ....Reaction tubes filled with catalyst particles
653 ....Reaction tubes containing structured catalyst
654 ....Reaction tubes having catalyst coating
655 ....Individual supply of reactants for each reaction tube
656 ....With a solid reactant
657 ....Operating at positive pressure
658 ....With tube plate (e.g., supporting plate)
659 ....With heating or cooling means
198 .Including heat exchanger for reaction chamber or reactants located therein
199 ..Electrical type
200 ..Indirect heat-exchange tube within reaction chamber with a nonreactant heat-exchange fluid passing therethrough
201 ...Tube and shell type
202 ..Heat-exchange jacket surrounding reaction chamber
203 ...Including fluid-transfer means connecting chamber to heat-exchange jacket
204 ...Means associated with jacket providing combustion gas as heat-exchange medium
205 ...Including baffle or stirring means disposed within jacket or chamber, the baffle means within chamber connected directly to wall thereof
206 ..Regenerative heat sink
207 ..Means injecting internal quench stream into reaction stream downstream of reaction stage
208 ..Apparatus operates at positive pressure
209 .Including means rotating reaction chamber during use
210 ..And means wiping or scraping interior surface of reaction chamber
211 .Including solid, extended surface, fluid contact reaction means; e.g., inert Raschig rings, particulate absorbent, particulate or monolithic catalyst, etc.
212 ..With means removing and recovering product from extended surface contact material
213 ..Particulate contact material type and means providing flow of particulate material into or out of reaction chamber with reactants or products
214 ...Transfer line type reaction chamber
215 ...And internal mixing means
216 ..Compact bed of particulate, fluid contact material and means providing gravity flow of material within bed
217 ..And means upstream of extended surface, fluid contact means removing particulate impurities from reactant stream

218 ..Fixed annularly shaped bed of contact material and means directing reactant therethrough substantially perpendicular to longitudinal axis of bed
219 ..And means loading contact material into, or unloading contact material from, reactor or means providing internal contact material reservoir
220 ..And reactant flow distributor upstream of contact means and within reaction chamber modifying velocity profile of reactant flow
221 ..Fixed contact bed type with resilient or differential thermal expansion compensating bed support means
222 ..Unitary (i.e., nonparticulate) contact bed, (e.g., monolithic catalyst bed, etc.)
223 ..With contact material regenerating means, per se, or combined with reactor
224 .Including internal mixing or stirring means
225 ..Mechanical type stirring means
226 ...In positive pressure reactor
227 ...Including a draft tube for internal recirculation
228 ...Including flow directing baffle attached directly to reaction chamber wall
229 ...Longitudinally extending spiral stirring means
230 ..Thermosyphon or differential density mixing means; e.g., means internally recycling reaction mass via differential density pumping, etc.
231 ...Gas sparger type mixing means submerged in liquid reactant
232 .Including solid reactant and means charging solids into, or dischanging solids from, reaction chamber
233 ..Having both charge and discharge means along with means conveying solids therebetween located within reaction chamber
234 .Including external recycle loop
235 ..And means heating or cooling loop or reaction mass located therein
236 .Including means separating reaction chamber into plural reactant-containing compartments and means moving reactant therebetween
237 ..Movably mounted container-type separating means and means moving same
238 ..Solid reactant containing perforated or porous container-type separating means
239 .Reaction chamber includes at least one perforated, porous, or semipermeable wall and is adapted for holding solid reactant
240 .Including specific material of construction
241 ..Reactor liner
242 .Positive pressure type
243 **PHYSICAL TYPE APPARATUS**
244 .Including serially disposed vaporizing heating means (sublimer) and solid material deposition means maintained at a temperature lower than said heating means (condenser)
245.1 .Crystallizer
250.1 ..Crucible-free zone refiner
251 ..Including means separating and conveying crystals to a melting zone
252 ..Hydraulic classifier with crystallizer
253 ..Including feed compartment for introducing nutrient
254 ..Movable crystallizer or scraping means
255 .Means separating or dissolving a material constituent
256 ..Liquid-liquid contact means
257 ...Including pulsator, adjustable plates, or plural inlets; e.g., spraying, etc.
258 ...Including rotating chamber or rotating member within chamber; e.g., mixer-settler, etc.
259 ....Having rotating member within chamber

260 ...Including heating and cooling means
261 ..Liquid-solid contact means
262 ...Sulfur extraction
263 ...Including monolithic nonporous body of solute
264 ...Including means restricting solvent contact to one end of body of solute
265 ...Buoyant holder
266 ...Manual or mountable holder; e.g., soap holder, etc.
267 ...Including means to remove solids from a filter
268 ...Conveyor support for solid material during contact; e.g., bucket, etc.
269 ...Including rotating member
270 ....Member is container
271 .....Including internal rotating member
272 .....Partitions divide container
273 ....Member conveys material into and out of container; e.g., screw propeller, etc.
274 ...Including perforated member which is nonlinear or inclined with respect to the major axis of container
275 ...Including parallel perforated members perpendicular to, or parallel to, major axis of container
276 ...Side wall of holder perforated
277 ....Perforations of holder form inlet for solvent
278 ...Including plural orifice inlet, or deflector adjacent inlet for solvent flow
279 ....Having inlet submerged within body of a solid solute
280 ...Solvent vapor condenser
281 ...Means recirculating solvent
282 ...Including bypass
283 ...Including dip tube for inlet or outlet of fluid solvent
284 ...Internal heater; e.g., steam coil, etc.
285 ..And heating means
286 ...Including mechanical comminuting or conveying means
287 ....Within treating vessel
288 ...Including means removing vapor from treated material
289 ....And direct contact heating fluid means within separating or dissolving chamber vessel
290 ....And indirect contact heating fluid means in separating or dissolving chamber
291 .Combined
292 .Apparatus for treating solid article or material with fluid chemical
293 ..Fluid having simultaneous diverse function
294 ..Including flexible or collapsible treating chamber
295 ..Including pressure treating chamber (above ambient)
296 ...Fluid pressure maintains closure or seal
297 ...And rack, support or handling means
298 ...And vaporizer; e.g., boiler, etc.
299 ....Constituting treating chamber
300 ..Including rack, support or handling means
301 ...Apparatus closure operates means immersing article or material in liquid chemical
302 ...For treating container or covers therefor
303 ....Container is inverted
304 ....Including endless conveyor
305 .Including gas generating means
306 .Including means for adding a material to a gas
307 .Heat treating vessel with heating means
308 ..Including multiple stages
309 ..Including comminuting, kneading, or surface-wiping means interior or vessel
310 **ELEMENTS OR ADJUNCTS**
311 .Bed support means (e.g., support grid or plate for supporting particulate bed of contact material, etc.)
312 .Tube element containing extended surface contact reaction means (e.g., a tube internally coated or packed with a catalyst, etc.)

CROSS-REFERENCE ART COLLECTIONS

900 **DECREASING POLLUTION OR ENVIRONMENTAL IMPACT**
901 **POLYMER DISSOLVER**
902 **SODIUM CHLORIDE AND POTASSIUM CHLORIDE DISSOLVER**
903 **RADIOACTIVE MATERIAL APPARATUS**
904 **NITROGEN FIXATION MEANS**
905 **MISCELLANEOUS LIQUID STERILIZATION MEANS**
906 **PLASMA OR ION GENERATION MEANS**
907 **CORONA OR GLOW DISCHARGE MEANS**
908 **CRUCIBLES [B01L 3/04]**
909 **CRYSTALLIZING DISHES [B01L 3/06]**
910 **FLASKS [B01L 3/08]**
911 **WASH BOTTLES [B01L 3/10]**
912 **GAS JARS OR CYLINDERS [B01L 3/12]**
913 **TEST TUBES [B01L 3/14]**
914 .Specific test tube, per se [B01L 3/14B]
915 ..With identification means, e.g., coded [B01L 3/14B2]
916 .Closing or opening means, e.g., corks, bungs [B01L 3/14C]
917 ..With identification means, e.g., coded [B01L3/14C2]
918 .Specially adapted for centrifugation [B01L 3/14D]
919 **BURETTES; PIPETTES [B01L 3/02]**
920 .Burettes, i.e., for withdrawing and redistributing liquids through different conduits [B01L 3/02B]
921 ..Plunger type [B01L 3/02B2]
922 .Pipettes, i.e., with only one conduit for withdrawing and redistributing liquids [B01L 3/02C]
923 ..Plunger pump type [B01L 3/02C3]
924 ...Capillary pipettes, i.e., having a very small bore [B01L 3/02C3C]
925 ...Having mechanical strokelength setting means, e.g., movable stops [B01L 3/02C3D]
926 ...Details of motor drive means [B01L 3/02C3M]
927 ...Having several coaxial pistons [B01L 3/02C3P]
928 ...Repeating pipettes, i.e. for dispensing multiple doses from a single charge [B01L 3/02C3R]
929 ...Supports for pipettes [B01L 3/02C3S]
930 .Drop counters or drop formers [B01L 3/02D]
931 .Interchangeable or disposable dispensing tips [B01L 3/02E]
932 ..Cooperating with positive ejection means [B01L 3/02E2]
933 ..Means for supplying or disposing of tips, e.g., racks or cassettes [B01L 3/02E4]
934 .Mounted within a receptacle [B01L 3/02F]
935 **FLUID TRANSFERRING GLASSWARE [B01L 3/00B]**
936 .Tubes; conduits [B01L 3/00B2]
937 .Joints; seals [B01L 3/00B4]
938 .Stopcocks; valves [B01L 3/00B6]
939 **CONTAINERS FOR THE PURPOSE OF RETAINING A MATERIAL TO BE ANALYZED [B01L 3/00C]**
940 .Made of a rigid material [B01L 3/00C2]
941 ..With identification means, e.g., coded [B01L 3/00C2B]
942 ..For multiple samples, e.g., micro-titration plate [B01L 3/00C2D]
943 ...Specially adapted for heating or cooling samples [B01L 3/00C2D2]
944 .Made of a flexible material [B01L 3/00C4]
945 ..With identification means, e.g., coded [B01L 3/00C4B]
946 .With fluid transport, e.g., multi-compartment structure [B01L 3/00C6]
947 ..Using capillary action, including fluid transfer through absorbent matrix [B01L 3/00C6C]
948 ..For multiple samples, e.g., multi-well filtration [B01L 3/00C6D]

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS ANALYZER, STRUCTURED INDICATOR, OR MANIPULATIVE LABORATORY DEVICE**

FOR 100 .Structured visual or optical indicator, per se (422/55)
FOR 101 ..Having reagent in absorbent or bibulous substrate (422/56)
FOR 102 ..Having coated reagent (422/57)
FOR 103 ..In holder or container having special form (422/58)
FOR 104 ...Column (422/59)
FOR 105 ....Having plural-layered material (422/60)
FOR 106 .Test package or kit (422/61)
FOR 107 .Miscellaneous laboratory apparatus and elements, per se (422/99)
FOR 108 ..Pipette or other volumetric fluid transfer means (422/100)
FOR 109 ..Including means for separating a constituent; e.g., filter, condenser, extractor, etc. (422/101)
FOR 110 ..Container (422/102)
FOR 111 ..Valve or connector structure (422/103)
FOR 112 ..Holder, support, housing, or hood (422/104)

CHEMICAL REACTOR

FOR 113 .Including plural reaction stages (422/188)
FOR 114 ..And means providing discrete sequential reaction stages; e.g., train, etc. (422/189)
FOR 115 ...Plural solid, extended surface, fluid contact reaction stages each containing; e.g., inert Raschig rings, particulate sorbent, particulate or monolithic catalyst, etc. (422/190)
FOR 116 ....Superimposed reaction stages in single reaction chamber (422/191)
FOR 117 ....At least one reaction stage formed of fixed, annularly shaped bed of contact material and means directing reaction stream therethrough substantially perpendicular to longitudinal axis of bed (422/192)
FOR 118 ...Reaction stages located within single reaction chamber (422/193)
FOR 119 ....And means downstream of a stage for internally injecting a reactant into a reaction stream for interreaction in a subsequent stage, or injecting an internal quench stream into reaction stream passing between stages (422/194)
FOR 120 ....Means within reaction chamber redistributing reaction stream as it passes between adjacent stages (422/195)
FOR 121 ..Including plural parallel reaction stages with each stage in form of a reaction tube (422/196)
FOR 122 ...Tubular stages in single reaction chamber (422/197)