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| 1 | PROCESSES | 36 | .Succeeding receiver advanced to filling position |
| 1.1 | .Battery grid pasting | | |
| 2 | .Filling dispensers | 37 | DIVERSE FLUID CONTAINING PRESSURE FILLING SYSTEMS INVOLVING RECEIVER GAS CONTENT MODIFICATION |
| 3 | ..Aerosol or gas-charged type | | |
| 4 | .Gas or variation of gaseous condition in receiver | | |
| 5 | ..With filling with fluent non-gaseous materials | 38 | .Tire inflation |
| 6 | ...Counter-pressure type | 39 | .Filling means controlled by gas condition in receiver |
| 7 | ..With evacuation of container | 40 | ..Control by level in filled receiver |
| 8 | ..Vacuum | | |
| 9 | .Plural materials | 41 | ...Air pump external to flow line |
| 10 | .Bag filling | 42 |Float controlled vacuum line cut-off |
| 11 | .With material treatment | 43 |Vacuum line vented to atmosphere |
| 12 | ..Compacting | | |
| 13 | MODIFICATION OF FILLING CYCLE IN STARTING AND STOPPING | 44 | .Gas and other material separating passage or chamber |
| 14 | SIPHON BOTTLE CHARGING ARRANGEMENTS | 45 | ..Material returned to supply |
| 15 | .For receiver with diverse filling opening | 46 | .System fluid used in seal or in valve or lift operation |
| 16 | .With plural heads, stations or materials | 47 | .Gas control or supply varied, shifted or supplemented during cycle |
| 17 | .With gas capsule supporting or manipulating means | 48 | ..Gas cycle for pre-treatment of receiver or contents material |
| 18 | FILLING OR REFILLING OF DISPENSERS | 49 | ..Plural or diverse gassing and/or filling cycles |
| 19 | .With cutter or punch for gas pressure cartridge | 50 | ..Shifted to vent or fill pipe |
| 20 | .Aerosols | 51 | .Gas condition control in housing for receiver |
| 20.5 | .Coating-implement-type receiver | | |
| 21 | .By operation of means causing or controlling dispensing | 52 | .With separate storage of gas displaced from receiver |
| 22 | ..Removable dispenser is supply container closure | 53 | ..With receiver vent to measuring trap |
| 23 | ...Expansible chamber dispenser | 54 | .With plural diverse passages for gas to receiver or head |
| 24 |Resilient wall | 55 | ..Vent to drain fill pipe |
| 25 | ..Expansible chamber of fluid pressure applying or controlling means | 56 | ..Three or more |
| 26 | ...Dispenser carried expansible chamber pump | 57 | ..Receiver vented to atmosphere before separation (e.g., snift) |
| 27 | ...Container with follower | 58 | ...Constant bleed |
| 28 | ..Container mounted jet pump | 59 | .Filling with exhausting the receiver |
| 29 | .Closure type with manually controlled vent | 60 | ..Receiver coupling comprises movable pump element |
| 31 | CAPILLARY TYPE | 61 | ..Vacuum cut-off before filling |
| 32 | BATTERY GRID PASTING | 62 | .With lateral travel of registering head and receiver |
| 33 | .Separate sources applied to opposite sides | | |
| 34 | CENTRIFUGAL FILLING | 63 | .Gas treatment |
| 35 | PLURAL CONNECTED RECEIVERS FILLED BY SERIAL FLOW | 64 | ..Of filled receiver |
| | | 65 | EVACUATION APPARATUS |

CLASS 141 FLUENT MATERIAL HANDLING, WITH RECEIVER OR RECEIVER
COACTING MEANS

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| 66 | .With filling with gas | 103 | .Separate stations for a single receiver |
| 67 | FLUENT CHARGE IMPELLED OR FLUID CURRENT CONVEYED INTO RECEIVER | 104 | .Selectively utilized sources |
| 68 | .Valve bag type | 105 | .With common discharge |
| 69 | WITH MATERIAL TREATMENT | 106 | ..Dumping or draining |
| 70 | .With fluid contact (e.g., jetting) | 107 | ..With mingling in or successive path through trap |
| 71 | .Compacting | 108 | SCOOP TYPE FILLER WITH ASSOCIATED RECEIVER |
| 72 | ..Agitation of head and receiver | 109 | .Receiver within scoop or inserter |
| 73 | ..Compacting material in receiver | 110 | ABSORPTION AND/OR IMMERSION |
| 74 | ...Agitation | 111 | .With handling means for receiver |
| 75 |Of suspended receiver | 112 | .Receiver secured to supply closure |
| 76 |Valve bag chair | 113 | RECEIVER FILLED THROUGH BOTTOM OR WHILE INVERTED |
| 77 | ...With distortion of or impact on receiver side walls | 114 | WITH MANIPULATION OF FLEXIBLE OR COLLAPSIBLE RECEIVER OR SUPPLY |
| 78 | ...Agitating means associated with receiver conveyer | 115 | DRIP PREVENTION BY FLOW REVERSING AND/OR OVERFILL REMOVAL |
| 79 |Rotary conveyer | 116 | .By means reversing direction of flow |
| 80 | ...In filled receiver | 117 | ..Expanding chamber in disengaged head |
| 81 | ..With contraction of trap to form charge | 118 | ..By tilting receiver and adjoined filler |
| 82 | .Heating or cooling | 119 | ..Interconnected supply valve cut-off and vacuum control |
| 83 | WITH TESTING OR WEIGHING RECEIVER CONTENT CONVERTIBLE | 120 | ..Siphonic return to supply |
| 84 | WITH SOIL REMOVING, COATING, LUBRICATING, STERILIZING AND/OR DRYING | 121 | .Separate removal station |
| 85 | .Drip collection | 122 | ..With subsequent filling |
| 86 | ..Collector shiftable to non-use position | 123 | ..Combined displacement receptacle and vacuum means |
| 87 | ..Collector associated with receiver support | 124 | ..Receiver tilting or inverting means |
| 88 | .With cleaning, coating or drying means | 125 | ..Wiping, scraping or spatulating means (e.g., trimming) |
| 89 | ..Nozzle cleaner | 126 | .Simultaneous filling and removing |
| 90 | ..Treatment by fluids | 127 | ..Double acting or plural pumps |
| 91 | ...Pre-treatment of receiver | 128 | DRIBBLE OR REDUCED FLOW AT END OF CYCLE |
| 92 | .Suction hoods and off-takes | 129 | WITH CONVEYING MEANS TO SUPPLY SUCCESSIVE RECEIVERS |
| 93 | WITH SIGNAL, INDICATOR, RECORDER, INSPECTION MEANS OR EXHIBITOR | 130 | .Sampler type |
| 94 | .Level or pressure in receiver | 131 | .Continuous flow type |
| 95 | ..Hose nozzle or faucet mounted | 132 | ..Receivers with overlapping flanges or apertured shields |
| 96 | WITH GUARD OR SCREEN FOR OPERATOR COMBINED | 133 | ..Receiver carrier forms moving support for supply |
| 97 | PLURAL DIVERSE FILLING LINES | 134 | ..With spaced receivers and redirected flow |
| 98 | PLURAL MATERIALS, MATERIAL SUPPLIES OR CHARGES IN A RECEIVER | | |
| 99 | .Lateral travel of registering head and receiver | | |
| 100 | .Plural charges from the same source | | |

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| 135 | .With lateral motion of registering head and receiver | 169 | ..Plural receiver lines to or from single |
| 136 | ..Bodily lifted or swinging siphon filling means | 170 | ..Lateral shift at filling station between parallel receiver paths |
| 137 | ..Laterally reciprocating head or trap | 171 | ..With change in receiver orientation |
| 138 | ..Interrupted or irregular cycle | 172 | ..With lifting or lowering means for receiver for filling |
| 139 | ...Automatic control by contents material | 173 | ..With receiver dispenser |
| 140 | ...No can - no fill | 174 | ...Cup-type dispenser |
| 141 |Power control by receiver | 175 | ...Reciprocating discharge means and receiver guideway |
| 142 |Cam track switching | 176 | ..Conveyer with relatively movable receiver discharge means |
| 143 |Vertical axis trigger | 177 | .Nozzle, guide or conveyer adjustable to receiver size |
| 144 | ..Rotary set of heads | 178 | .Successive groups or non-sequential filling of a receiver series |
| 145 | ..Common vertical axis for conveyer | 179 | ..From a single uniform line of receivers |
| 146 | ...With vertically reciprocating plunger or valve piston for each head | 180 | .Continuously moving conveyer with receiver stop |
| 147 | ...With cam or abutment operated valve or head | 181 | .With head, manifold or supply lowering means |
| 148 | ...With lift means for receiver | 182 | ..Separate movable or removable sleeve or funnel supply terminal |
| 149 |With additional cushion or yielding lift | 183 | .With interconnected contents discharge means |
| 150 |Cam lift or lowered movement | 184 | ..With predetermined number of cycles |
| 151 | ...Manually placed receivers | 185 | ...Single group filled by rows |
| 152 | ...Adjustable to receiver size | 186 | ..Plural lines |
| 153 | .Automatic control of filling cycle by contents material | 187 | ..With contents gripping or penetrating discharge means |
| 154 | .Receiver with asymmetrical or flap closed inlet | 188 | ..With valve period adjustment |
| 155 | .Safety-stop or non-operating interlock between supply and conveyers | 189 | ..By contact with conveyer projection |
| 156 | .Fill triggered by receiver | 190 | ..Ratchet drive for conveyer |
| 157 | ..Individual receiver controls the filling cycle therefor | 191 | ..Cam and gear drives |
| 158 | ...Charge-forming prevention or charge disposal | 192 | AUTOMATIC CONTROL OF FLOW CUTOFF OR DIVERSION |
| 159 | ...Power control by receiver | 193 | .Responsive to relative recession of supply means and receiver engaging means |
| 160 |Servo-system | 194 | ..Ejection or release of filled receiver |
| 161 |Clutch control | 195 | ..Discharge assistant control by filled receiver |
| 162 | ...Power derived from lateral motion of receiver | 196 | .Control by test receiver or chamber or by filled preceding receiver |
| 163 | .Horizontal axis conveyer | | |
| 164 | .Receiver supported on side during filling | | |
| 165 | .With relatively movable receiver grip or centering means | | |
| 166 | ..Bag type receiver | | |
| 167 | .With variable rate of receiver travel in cycle | | |
| 168 | .Conveyer with additional receiver conveying or manipulating means | | |

CLASS 141 FLUENT MATERIAL HANDLING, WITH RECEIVER OR RECEIVER
COACTING MEANS

| | | | |
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| 197 | .In gas filled receivers | 233 | ..Track on receiver supporting means |
| 198 | .Level or overflow responsive | | |
| 199 | ..Funnel type closed by float | 234 | PLURAL FILLING MEANS |
| 200 | ...Valve latched in open position | 235 | .Adjustable lateral spacing of heads or receivers |
| 201 | ..Normally open with closed position holding means | 236 | .Diverse flow manifold |
| 202 | ...Plural series valves | 237 | .For plural receivers simultaneously filled |
| 203 | ...Valve stem accessible at top of funnel | 238 | ..Supply apportioned prior to delivery |
| 204 |Single valve and float stem | | |
| 205 | ...Pivoted valve | 239 | ...Tilting tray or trough means |
| 206 | ..Manually initiated valve with both manual and level cut-off controls | 240 | ...Grid or cellular insert type divider |
| 207 | ..With receiver positioned interlock | 241 | ...Inverted for discharge to receivers |
| 208 | ..With nozzle dislodgment valve trip means | 242 | ..With discharge means |
| 209 | ...Manual control disabler or disconnect | 243 | ...With means for selective operation |
| 210 | ...Separate controls for plural series liquid flow line valves | 244 | ..Manifold or divider |
| 211 |Self-opening valve | 245 |Displacement type |
| 212 |Float initiates closing control | 246 | ..With receiver ejecting and/or accommodating means |
| 213 |Float arm operated valve | 247 | .Aids to manual filling |
| 214 |Pressure initiated closing control | 248 | .Alternating |
| 215 |Liquid back pressure completes closing | 249 | WITH CHARGE FORMING MEANS |
| 216 | ...Float operated valve | | CONTRACTING TRANSVERSELY TO FLOW PATH |
| 217 | ..Diverse controls for single valve | 250 | WITH MEANS TO MOVE SUPPLY MEANS AND/OR RECEIVER TO, FROM OR DURING FLOW RELATION |
| 218 |Valve latched open | 251 | .Relatively receding discharge assistant and receiver engaging means |
| 219 |Electromagnetic trip | 252 | ..With external form for receiver |
| 220 |Float controlled trip means | 253 | ..With lift or power drive for receiver support |
| 221 |With sensitivity or level adjustment | 254 | ..Receiver support bias varied with position of support |
| 222 |Adjustable receiver engaging or coacting means | 255 | ..With feeder and additional flow modifier or retarder at foot of fill tube |
| 223 |With spring means biasing valve to close | 256 | ..Continuous feeding during filling (e.g., rotary auger) |
| 224 |Reciprocating valve | 257 | ...Receding receiver support or engaging means |
| 225 |Air displacement trip means | 258 | ..Axially reciprocating discharge assistant |
| 226 |By response to receiver pressure increase | 259 | ...Rotatable reciprocating discharge assistant |
| 227 | ..External initiator as second diverse control | 260 | ...Reciprocating filling tube type discharge assistant |
| 228 | ...Series flow line valves | 261 | ...With synchronized intermittent supply (e.g., check valve) |
| 229 | ...Float control cut-off | 262 | ...With receding receiver support |
| 230 | WITH SIPHON FLOW CONTROL BY EQUALIZED LEVELS | | |
| 231 | PORTABLE SYSTEMS OR TRACK MOUNTED SUPPLY MEANS | | |
| 232 | .Track mounted | | |

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| 263 | .Relatively receding filling tube and receiver engaging means | 292 | ..Valve operator interconnected with receiver inlet engaging means |
| 264 | ..With flow stop or severer at foot of fill tube | 293 | ...Plural valves operated |
| 265 | .With means to separate filled receiver and internal form | 294 | ...With mechanical or lost motion connection |
| 266 | .With adjustable movable component | 295 | ...Concentric open vent |
| 267 | .Unitary receiver support and flow controller | 296 | ..Biased coaxial valve stem and nozzle |
| 268 | ..Rotary or oscillating | 297 | .Funnel type |
| 269 | .With clamp for receiver interconnected with movable head or lift | 298 | ..Concentric vent forms valve stem |
| 270 | .Both supply means and receiver support having movement | 299 | ..Concentric external vent |
| 271 | .Swinging support for receiver | 300 | ..Vent extends along wall to top |
| 272 | ..Tilting type support for separating receiver from filling head | 301 | .With valve |
| 273 | ..Inversion of receiver | 302 | ..Plural valved passages |
| 274 | ...Receiver with gravity operated valve | 303 | ...Float operated vent cut-off |
| 275 | .Receiver lift or lower for filling | 304 | ...Swingable nozzle operated liquid supply valve |
| 276 | ..With interconnected external means to control discharge | 305 | ...Rigidly interconnected or intergral valves |
| 277 | ..Fluid operated lift | 306 | ...Gravity seated inversion opened valve |
| 278 | ..Yielding lift | 307 | ..With trap or chamber in vent passage |
| 279 | .With movable support for hose connected head or supply | 308 | ..Air vent to supply cut-off by liquid in receiver |
| 280 | .Scraping or leveling by lateral relative movement of supply means and receiver | 309 | .With air inlet to liquid supply |
| 281 | .With means for manipulating a filled receiver for separation from head or support | 310 | .Passage formed by head and receiver spacing means |
| 282 | ..From an external form | 311 R | FILLING MEANS WITH RECEIVER OR RECEIVER COACTING MEANS |
| 283 | .With movement of receiver in horizontal plane | 312 | .Extensible or expansible inserted coupler or centering means for receiver |
| 284 | .Movably mounted supply | 313 | .Flexible or collapsible receiver |
| 285 | MULTIPLE PASSAGE FILLING MEANS FOR DIVERSE MATERIALS OR FLOWS | 314 | ..With bag or liner securing means |
| 286 | .With baffle, spreader, displacer, drip ring, filter or screen | 315 | ...Valve bag clamp and/or chair |
| 287 | .With gas expanded seal | 316 | ...With inserted or external form for bag |
| 288 | .Adjustable outlet element controls level | 317 | ...With flow controlling means |
| 289 | .Vent laterally shiftable | 318 | .Filling by retracting receiver or cartridge |
| 290 | .With flue or vent externally returning to supply | 319 | .Manually coupled and inverted |
| 291 | .With valve operated by receiver engaging means | 320 | ..With discharge assistant, trap or valve |
| | | 321 | ...Receiver operated supply discharge means or controller |
| | | 322 | ...Combined supply closure and trap |
| | | 323 | .Siphon type |
| | | 324 | .Continuous flow or overflow type supply |

CLASS 141 FLUENT MATERIAL HANDLING, WITH RECEIVER OR RECEIVER
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| | | | |
|-----|---|-------|--|
| 325 | ..Receiver with plural compartments or openings (e.g., vents) | 357 | ..Receiver applied to plunger-type follower |
| 326 | ..With means to cap or close an opening | 358 | ..Scoop or drawer type |
| 327 | ...Receiver open at both ends | 359 | ..Receiver weight operated discharge means |
| 328 | ..Filling means or support provides handle for receiver | 360 | ..Actuator juxtaposed outlet |
| 329 | ..With puncturing connecting means | 361 | ...Servo-system |
| 330 | ..Mounted on receiver | 362 | ...Relatively movable actuator |
| 331 | ..Funnel type | 363 | ..Filling supply supported by receiver |
| 332 | ..With connector, guide or support for separable supply | 364 | ..Dumping or draining type |
| 333 | ..Supply or flow path not concentric with receiver inlet | 365 | ..Material guide |
| 334 | ...Laterally extending spout | 366 | ...Supply container hand manipulated |
| 335 | ..Valves open when funnel rests on receiver | 367 | ..Adjustable contact area or plural interchangeable or selectively usable coupling means or flow paths |
| 336 | ..Valve closed by lifting on funnel handle | 368 | ..Adjustable gauge collar, displacement member or seal |
| 337 | ..Flexible, collapsible or folding | 369 | ..With receiver support, guide means, or shield |
| 338 | ...Stored in or on receiver | 370 | ..Guide or shield |
| 339 | ..Anti-swirl, anti-splash, cover or shield | 371 | ...Reciprocating guard or guide |
| 340 | ..With additional support | 372 | ...Receiver neck or inlet rim engaging support |
| 341 | ..With nonsystem support | 373 | ...For movement of receiver laterally of supply outlet |
| 342 |Nonuse | 374 | ..Fill tube extending to or near bottom of receiver |
| 343 |Supported on supply container | 375 | ..With support for removable supply container |
| 344 | ..With valve actuator or extended stem | 376 | ..With adjustable support for supply |
| 345 | ...Relatively movable | 377 | ..Receiver swingably supported or supported by bail |
| 346 | ..Interlocked discharge means, support and/or coupling | 378 | ..Plural interchangeable or selective or adjustable support for receiver |
| 347 | ..With coupling means responsive to material flow | 379 | ..Nonuse position or cover |
| 348 | ..Supply means carried receiver flow control opening means | 380 | ...Receiver supported by supply container |
| 349 | ..Coupling controls receiver inlet flow | 381 |Closure type |
| 350 | ..For inlet with externally engaged flap or closure member | 382 | ..Flexible hose terminal with receiver engaging means |
| 351 | ..Receiver actuated discharge means | 383 | ..With receiver and supply securing means |
| 352 | ..Movable supply or head | 384 | ..Rotatable collar or sleeve |
| 353 | ..Receiver coupling telescopes flow path elements | 385 | ..Telescoping jaws |
| 354 | ..Mechanical or lost motion connection | 386 | ..Fixed flange on supply means for engagement of receiver |
| 355 | ...Connection external to tube or tube sections | 311 A | ..Drip prevention |
| 356 | ..Control by contact at bottom of receiver | 387 | FILLING HEAD SHIFTABLY OR SEPARABLY CONNECTED TO SUPPLY |

- 388 .Flexible or collapsible coupling
section
- 389 ..Hand-held head
- 390 **INSERTED OR EXTERNAL FORM OR
PROTECTOR**
- 391 **MATERIAL GUIDES OR SUPPLY WITH
RECEIVER SUPPORTS (I.E., AIDS
TO MANUAL FILLING)**
- 392 **MISCELLANEOUS (E.G., FILLING
HEADS)**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

DIGESTS

- DIG 1 **MAGNETIC**
- DIG 2 **FLUIDIC FLOW CONTROL VALVES**

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COACTING MEANS