CPC COOPERATIVE PATENT CLASSIFICATION

F17C VESSELS FOR CONTAINING OR STORING COMPRESSED, LIQUEFIED OR SOLIDIFIED GASES; FIXED-CAPACITY GAS-HOLDERS; FILLING VESSELS WITH, OR DISCHARGING FROM VESSELS, COMPRESSED, LIQUEFIED, OR SOLIDIFIED GASES (storing fluids in natural or artificial cavities or chambers in the earth B65G 5/00; construction or assembling of bulk storage containers employing civil-engineering techniques E04H 7/00; variable-capacity gas-holders F17B; liquefaction or refrigeration machines, plants, or systems F25)

1/00 **Pressure vessels, e.g. gas cylinder, gas tank, replaceable cartridge** (pressurised apparatus for purposes other than storage, see the relevant subclasses such as A62C, B05B; associated with vehicles, see the appropriate subclass of classes B60 - B64; pressure vessels in general F16J 12/00; {autoclaves B01J 3/04; tank vehicles B60P 3/22; railway tank wagons for carrying fluent materials B61D 5/00; accumulators for supplying fluid under pressure F15B 1/04; liquified gas stoves F24C 3/00})

1/002 . {Storage in barges or on ships}

1/005 . {Storage of gas or gaseous mixture at high pressure and at high density condition, e.g. in the single state phase}

1/007 . {Underground or underwater storage}

1/02 . involving reinforcing arrangements {(F17C 1/14, F17C 1/16 take precedence)}

1/04 . . Protecting sheathings

1/06 . . . Built-up from wound-on bands or filamentary material, e.g. wires

1/08 . . Integral reinforcements, e.g. ribs

1/10 . with provision for protection against corrosion, e.g. due to gaseous acid ({F17C 1/14, F17C 1/16 take precedence}; inhibiting corrosion of metallic material or incrustation in general C23F)

1/12 . with provision for thermal insulation ({F17C 1/14, F17C 1/16 take precedence}; thermal insulation in general F16L 59/00)

1/14 . constructed of aluminium; constructed of non-magnetic steel

1/16 . constructed of plastics materials {(shaping of plastics B29C)}

3/00 **Vessels not under pressure**

3/005 . {Underground or underwater containers or vessels (storing in natural or artificial cavities in the earth in general B65G 5/00)}

3/02 . with provision for thermal insulation (thermal insulation in general F16L 59/00 {refrigerators F25D; insulation specially adapted for cryogenic vessels F17C 13/001; tank vehicles B60P 3/22; railway tank wagons B61D 5/00})

3/022 . . {Land-based bulk storage containers (civil engineering aspects E04H 7/00)}

3/025 . . {Bulk storage in barges or on ships (constructive aspects B63B 25/16)}

3/027 . . . {Wallpanels for so-called membrane tanks}

3/04 . . by insulating layers (F17C 3/08 takes precedence)

3/06 . . . on the inner surface, i.e. in contact with the stored fluid

3/08 . . by vacuum spaces, e.g. Dewar flask (for household use A47J 41/02)

3/085 . . . {Cryostats}

3/10 . . by liquid-circulating or vapour-circulating jackets

3/12 . with provision for protection against corrosion, e.g. due to gaseous acid (protection against corrosion in general C23F)

5/00 **Methods or apparatus for filling containers with liquefied, solidified, or compressed gases under pressures** (adding propellants to aerosol containers B65B 31/00)

NOTE

This group includes not only the filling of vessels for storage of compressed or liquefied gases, but also the filling of pressurised apparatus insofar as it is not covered by a single other subclass, e.g. A62C, B05B.

5/002 . {Automated filling apparatus}

5/005 . . {for gas bottles, such as on a continuous belt or on a merry-go-round}

5/007 . . {for individual gas tanks or containers, e.g. in vehicles (filling with liquid fuel not under pressure, B60S 5/02, B67D 7/00)}

5/02 . for filling with liquefied gases

5/04 . . requiring the use of refrigeration, e.g. filling with helium or hydrogen

5/06 . for filling with compressed gases

6/00 **Methods and apparatus for filling vessels not under pressure with liquefied or solidified gases**

7/00 **Methods or apparatus for discharging liquefied, solidified, or compressed gases from pressure vessels, not covered by another subclass**

7/02 . Discharging liquefied gases

7/04 . . with change of state, e.g. vaporisation

9/00 **Methods or apparatus for discharging liquefied or solidified gases from vessels not under pressure**

9/02 . with change of state, e.g. vaporisation

9/04 . . Recovery of thermal energy

11/00 **Use of gas-solvents or gas-sorbents in vessels {(absorbing compositions for acetylene C10L 3/04; absorbing compositions for hydrogen C01B 3/0005)}**

11/002 . {for acetylene}

11/005 . {for hydrogen}

11/007 . {for hydrocarbon gases, such as methane or natural gas, propane, butane or mixtures thereof [LPG]}

13/00 **Details of vessels or of the filling or discharging of vessels**

13/001 . {Thermal insulation specially adapted for cryogenic vessels (vessels not under pressure with insulation F17C 3/02; thermal insulation in general F16L 59/00)}

13/002 . {for vessels under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}

13/003 . . {Means for coding or identifying them and/or their contents}

13/004 . {for large storage vessels not under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}

13/005 . {for medium-size and small storage vessels not under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}

13/006 . . {for Dewar vessels or cryostats}

13/007 . . . {used for superconducting phenomena (investigating by nuclear magnetic resonance G01N 24/08; magnets having superconductive winding H01F 6/00)}

13/008 . {for use under microgravity conditions}

13/02 . Special adaptations of indicating, measuring, or monitoring equipment (measuring in general G01)

13/021 . . {having the height as the parameter}

13/023 . . {having the mass as the parameter}

13/025 . . {having the pressure as the parameter}

13/026 . . {having the temperature as the parameter}

13/028 . . {having the volume as the parameter}

13/04 . Arrangement or mounting of valves (valves per se F16K; {snap-coupling of nipples F16L 37/00})

13/045 . . {Automatic change-over switching assembly for bottled gas systems with two (or more) gas containers}

13/06 . Closures, e.g. cap, breakable member ({for autoclaves B01J 3/03}; closures for {large} containers in general B65D {B65D 90/54}; {for pressure vessels in general F16J 13/00})

13/08 . Mounting arrangements for vessels

13/081 . . {for large land-based storage vessels (supports for large containers in general B65D 90/12)}

13/082 . . {for large sea-borne storage vessels (load-accomodating arrangements for ships or waterborne vessels B63B 25/12)}

13/083 . . {for medium-sized mobile storage vessels, e.g. tank vehicles or railway tank vehicles}

13/084 . . {for small-sized storage vessels, e.g. compressed gas cylinders or bottles, disposable gas vessels, vessels adapted for automotive use}

13/085 . . . {on wheels (hand carts B62B)}

13/086 . . {for Dewar vessels or cryostats}

13/087 . . . {used for superconducting phenomena}

13/088 . . {for use under microgravity conditions}

13/10 . Arrangements for preventing freezing

13/12 . Arrangements or mounting of devices for preventing or minimising the effect of explosion (flame traps A62C 4/00); {Other safety measures}

13/123 . . {for gas bottles, cylinders or reservoirs for tank vehicles or for railway tank wagons}

13/126 . . {for large storage containers for liquefied gas (for large containers in general B65D 90/22)}

2201/00 **Vessel construction, in particular geometry, arrangement or size**

2201/01 . Shape

2201/0104 . . cylindrical

2201/0109 . . . with exteriorly curved end-piece

2201/0114 . . . with interiorly curved end-piece

2201/0119 . . . with flat end-piece

2201/0123 . . . with variable thickness or diameter

2201/0128 . . spherical or elliptical

2201/0133 . . toroidal

2201/0138 . . tubular

2201/0142 . . conical

2201/0147 . . complex

2201/0152 . . . Lobes

2201/0157 . . . Polygonal

2201/0161 . . . Honeycomb

2201/0166 . . . divided in several chambers

2201/0171 . . . comprising a communication hole between chambers

2201/0176 . . variable

2201/018 . . . with bladders

2201/0185 . . . with separating membrane

2201/019 . . . with pistons

2201/0195 . . . with bellows

2201/03 . Orientation

2201/032 . . with substantially vertical main axis

2201/035 . . with substantially horizontal main axis

2201/037 . . with sloping main axis

2201/05 . Size

2201/052 . . large (>1000 m3)

2201/054 . . medium (>1 m3)

2201/056 . . Small (<1 m3)

2201/058 . . portable (<30 l)

2201/06 . Vessel construction using filling material in contact with the handled fluid

2203/00 **Vessel construction, in particular walls or details thereof**

2203/01 . Reinforcing or suspension means

2203/011 . . Reinforcing means

2203/012 . . . on or in the wall, e.g. ribs

2203/013 . . . in the vessel, e.g. columns

2203/014 . . Suspension means

2203/015 . . . Bars

2203/016 . . . Cords

2203/017 . . . Magnetic means

2203/018 . . . by attachment at the neck

2203/03 . Thermal insulations

2203/0304 . . by solid means

2203/0308 . . . Radiation shield

2203/0312 . . . . cooled by external means

2203/0316 . . . . cooled by vaporised gas from the interior

2203/032 . . . . Multi-sheet layers

2203/0325 . . . Aerogel

2203/0329 . . . Foam

2203/0333 . . . . Polyurethane

2203/0337 . . . Granular

2203/0341 . . . . Perlite

2203/0345 . . . Fibres

2203/035 . . . . Glass wool

2203/0354 . . . Wood

2203/0358 . . . in form of panels

2203/0362 . . by liquid means

2203/0366 . . . Cryogen

2203/037 . . . Water
2203/0375 . . by gas
2203/0379 . . . Inert
2203/0383 . . . Air
2203/0387 . . . Cryogen
2203/0391 . . by vacuum
2203/0395 . . . Getter
2203/06 . Materials for walls or layers thereof; Properties or structures of walls or their materials
2203/0602 . . Wall structures; Special features thereof
2203/0604 . . . Liners
2203/0607 . . . Coatings
2203/0609 . . . Straps, bands or ribbons
2203/0612 . . . Wall structures
2203/0614 . . . . Single wall
2203/0617 . . . . . with one layer
2203/0619 . . . . . with two layers
2203/0621 . . . . . with three layers
2203/0624 . . . . . with four or more layers
2203/0626 . . . . Multiple walls
2203/0629 . . . . . Two walls
2203/0631 . . . . . Three or more walls
2203/0634 . . Materials for walls or layers thereof
2203/0636 . . . Metals
2203/0639 . . . . Steels
2203/0641 . . . . . Non-magnetic steels
2203/0643 . . . . . Stainless steels
2203/0646 . . . . Aluminium
2203/0648 . . . . Alloys or compositions of metals
2203/0651 . . . . . Invar
2203/0653 . . . . Lead
2203/0656 . . . . in form of filaments
2203/0658 . . . Synthetics
2203/066 . . . . Plastics
2203/0663 . . . . in form of fibers or filaments
2203/0665 . . . . . radially wound
2203/0668 . . . . . axially wound
2203/067 . . . . . helically wound
2203/0673 . . . . . Polymers
2203/0675 . . . . with details of composition
2203/0678 . . . Concrete
2203/068 . . Special properties of materials for vessel walls
2203/0682 . . . with liquid or gas layer
2203/0685 . . . flexible
2203/0687 . . . superconducting
2203/069 . . . Break point in the wall
2203/0692 . . . transparent
2203/0695 . . . pre-constrained
2203/0697 . . . comprising nanoparticles

2205/00 Vessel construction, in particular mounting arrangements, attachments or identifications means

2205/01 . Mounting arrangements
2205/0103 . . Exterior arrangements
2205/0107 . . . Frames
2205/0111 . . . Boxes
2205/0115 . . . Dismountable protective hulls
2205/0119 . . . Vessel walls form part of another structure
2205/0123 . . characterised by number of vessels
2205/0126 . . . One vessel
2205/013 . . . Two or more vessels
2205/0134 . . . . characterised by the presence of fluid connection between vessels
2205/0138 . . . . . bundled in series
2205/0142 . . . . . bundled in parallel
2205/0146 . . . . . with details of the manifold
2205/0149 . . . . Vessel mounted inside another one
2205/0153 . . Details of mounting arrangements
2205/0157 . . . for transport
2205/0161 . . . . with wheels
2205/0165 . . . . with handgrip
2205/0169 . . . stackable
2205/0173 . . . lockable
2205/0176 . . . with ventilation
2205/018 . . . Supporting feet
2205/0184 . . . Attachments to the ground, e.g. mooring or anchoring
2205/0188 . . . Hanging up devices
2205/0192 . . . with external bearing means
2205/0196 . . . with shock absorbing means
2205/03 . Fluid connections, filters, valves, closure means or other attachments
2205/0302 . . Fittings, valves, filters, or components in connection with the gas storage device
2205/0305 . . . Bosses, e.g. boss collars
2205/0308 . . . Protective caps
2205/0311 . . . Closure means
2205/0314 . . . . breakable, e.g. with burst discs
2205/0317 . . . . fusing or melting
2205/032 . . . . pierceable
2205/0323 . . . Valves
2205/0326 . . . . electrically actuated
2205/0329 . . . . manually actuated
2205/0332 . . . . Safety valves or pressure relief valves
2205/0335 . . . . Check-valves or non-return valves
2205/0338 . . . Pressure regulators
2205/0341 . . . Filters
2205/0344 . . . . Sinter type
2205/0347 . . . . Active charcoal type
2205/035 . . . Flow reducers
2205/0352 . . . Pipes
2205/0355 . . . . Insulation thereof
2205/0358 . . . . coaxial
2205/0361 . . . . corrugated
2205/0364 . . . . flexible or articulated, e.g. a hose
2205/0367 . . . . Arrangements in parallel
2205/037 . . . Quick connecting means, e.g. couplings
2205/0373 . . . . Adapters
2205/0376 . . . Dispensing pistols
2205/0379 . . . Manholes or access openings for human beings
2205/0382 . . . Constructional details of valves, regulators
2205/0385 . . . . in blocks or units
2205/0388 . . Arrangement of valves, regulators, filters
2205/0391 . . . inside the pressure vessel
2205/0394 . . . in direct contact with the pressure vessel
2205/0397 . . . . on both sides of the pressure vessel
2205/05 . Vessel or content identifications, e.g. labels
2205/051 . . by coating
2205/052 . . by stickers
2205/054 . . by bar codes
2205/055 . . by magnetic means
2205/057 . . by chips

2205/058 . . by Radio Frequency Identification

2209/00 Vessel construction, in particular methods of manufacturing

2209/21 . Shaping processes
2209/2109 . . Moulding
2209/2118 . . . by injection
2209/2127 . . . by blowing
2209/2136 . . . using wax moulds
2209/2145 . . . by rotation
2209/2154 . . Winding
2209/2163 . . . with a mandrel
2209/2172 . . Polishing
2209/2181 . . Metal working processes, e.g. deep drawing, stamping or cutting
2209/219 . . Working processes for non metal materials, e.g. extruding
2209/22 . Assembling processes
2209/221 . . Welding
2209/222 . . . by friction
2209/224 . . Press-fitting; Shrink-fitting
2209/225 . . Spraying
2209/227 . . by adhesive means
2209/228 . . by screws, bolts or rivets
2209/23 . Manufacturing of particular parts or at special locations
2209/232 . . of walls
2209/234 . . of closing end pieces, e.g. caps
2209/236 . . . Apparatus therefore
2209/238 . . Filling of insulants

2221/00 Handled fluid, in particular type of fluid

2221/01 . Pure fluids
2221/011 . . Oxygen
2221/012 . . Hydrogen
2221/013 . . Carbone dioxide
2221/014 . . Nitrogen
2221/015 . . Carbon monoxide
2221/016 . . Noble gases (Ar, Kr, Xe)
2221/017 . . . Helium
2221/018 . . Acetylene
2221/03 . Mixtures
2221/031 . . Air
2221/032 . . Hydrocarbons
2221/033 . . . Methane, e.g. natural gas, CNG, LNG, GNL, GNC, PLNG
2221/035 . . . Propane butane, e.g. LPG, GPL
2221/036 . . . Hydrates
2221/037 . . Containing polluant, e.g. H_2S, Cl
2221/038 . . Refrigerants
2221/05 . Ultrapure fluid
2221/07 . Hyperpolarised gases
2221/08 . Ergols, e.g. hydrazine

Fluid contained in the vessel; Filling and discharging the fluid

2223/00 Handled fluid before transfer, i.e. state of fluid when stored in the vessel or before transfer from the vessel

2223/01 . characterised by the phase
2223/0107 . . Single phase
2223/0115 . . . dense or supercritical, i.e. at high pressure and high density
2223/0123 . . . gaseous, e.g. CNG, GNC
2223/013 . . . liquid
2223/0138 . . . solid
2223/0146 . . Two-phase
2223/0153 . . . Liquefied gas, e.g. LPG, GPL
2223/0161 . . . . cryogenic, e.g. LNG, GNL, PLNG
2223/0169 . . . . subcooled
2223/0176 . . . Solids and gas
2223/0184 . . . Liquids and solids
2223/0192 . . Three-phase, e.g. CO_2 at triple point
2223/03 . characterised by the pressure level
2223/031 . . Not under pressure, i.e. containing liquids or solids only
2223/033 . . Small pressure, e.g. for liquefied gas
2223/035 . . High pressure (>10 bar)
2223/036 . . Very high pressure (>80 bar)
2223/038 . . Subatmospheric pressure
2223/04 . characterised by other properties of handled fluid before transfer
2223/041 . . Stratification
2223/042 . . Localisation of the removal point
2223/043 . . . in the gas
2223/045 . . . . with a dip tube
2223/046 . . . in the liquid
2223/047 . . . . with a dip tube
2223/048 . . . in the solid

2225/00 Handled fluid after transfer, i.e. state of fluid after transfer from the vessel

2225/01 . characterised by the phase
2225/0107 . . Single phase
2225/0115 . . . dense or supercritical, i.e. at high pressure and high density
2225/0123 . . . gaseous, e.g. CNG, GNC
2225/013 . . . liquid
2225/0138 . . . solid
2225/0146 . . Two-phase
2225/0153 . . . Liquefied gas, e.g. LPG, GPL
2225/0161 . . . . cryogenic, e.g. LNG, GNL, PLNG
2225/0169 . . . . subcooled
2225/0176 . . . Solids and gas
2225/0184 . . . Liquids and solids
2225/0192 . . Three-phase, e.g. CO_2 at triple point
2225/03 . characterised by the pressure level
2225/031 . . Not under pressure, i.e. containing liquids or solids only
2225/033 . . Small pressure, e.g. for liquefied gas
2225/035 . . High pressure, i.e. between 10 and 80 bars
2225/036 . . Very high pressure, i.e. above 80 bars
2225/038 . . Subatmospheric pressure
2225/04 . characterised by other properties of handled fluid after transfer
2225/041 . . Stratification
2225/042 . . Localisation of the filling point
2225/043 . . . in the gas
2225/044 . . . . at several points, e.g. with a device for recondensing gas
2225/045 . . . . with a dip tube
2225/046 . . . in the liquid
2225/047 . . . . with a dip tube
2225/048 . . . in the solid

2227/00 **Transfer of fluids, i.e. method or means for transferring the fluid; Heat exchange with the fluid**
2227/01 . Propulsion of the fluid
2227/0107 . . by pressurising the ullage
2227/0114 . . with vacuum injectors, e.g. venturi
2227/0121 . . by gravity
2227/0128 . . with pumps or compressors
2227/0135 . . . Pumps
2227/0142 . . . . with specified pump type, e.g. piston or impulsive type
2227/015 . . . . with cooling of the pump
2227/0157 . . . Compressors
2227/0164 . . . . with specified compressor type, e.g. piston or impulsive type
2227/0171 . . . Arrangement
2227/0178 . . . . in the vessel
2227/0185 . . . . comprising several pumps or compressors
2227/0192 . . by using a working fluid
2227/03 . Heat exchange with the fluid
2227/0302 . . by heating
2227/0304 . . . using an electric heater
2227/0306 . . . using the same fluid
2227/0309 . . . using another fluid
2227/0311 . . . . Air heating
2227/0313 . . . . . by forced circulation, e.g. using a fan
2227/0316 . . . . Water heating
2227/0318 . . . . . using seawater
2227/032 . . . . . using geothermal water
2227/0323 . . . . in a closed loop
2227/0325 . . . by expansion using "Joule-Thompson" effect
2227/0327 . . . with recovery of heat
2227/033 . . . using solar energy
2227/0332 . . . by burning a combustible
2227/0334 . . . by radiation means
2227/0337 . . by cooling
2227/0339 . . . using the same fluid
2227/0341 . . . using another fluid
2227/0344 . . . . Air cooling
2227/0346 . . . . . by forced circulation, e.g. using a fan
2227/0348 . . . . Water cooling
2227/0351 . . . . . using seawater
2227/0353 . . . . using cryocooler
2227/0355 . . . . in a closed loop
2227/0358 . . . by expansion
2227/036 . . . . "Joule-Thompson" effect
2227/0362 . . . . in a turbine
2227/0365 . . . with recovery of heat
2227/0367 . . Localisation of heat exchange
2227/0369 . . . in or on a vessel
2227/0372 . . . . in the gas
2227/0374 . . . . in the liquid
2227/0376 . . . . in wall contact
2227/0379 . . . . . inside the vessel
2227/0381 . . . . . integrated in the wall
2227/0383 . . . . . outside the vessel
2227/0386 . . . . . with a jacket
2227/0388 . . . separate
2227/039 . . . . on the pipes
2227/0393 . . . . using a vaporiser
2227/0395 . . . . using a submerged heat exchanger
2227/0397 . . . characterised by fins
2227/04 . Methods for emptying or filling
2227/041 . . vessel by vessel
2227/042 . . . with change-over from one vessel to another
2227/043 . . by pressure cascade
2227/044 . . by purging
2227/045 . . by vacuum
2227/046 . . by even emptying or filling
2227/047 . . by repeating a process cycle
2227/048 . . by maintaining residual pressure

2250/00 **Accessories; Control means; Indicating, measuring or monitoring of parameters**
2250/01 . Intermediate tanks
2250/03 . Control means
2250/032 . . using computers
2250/034 . . using wireless transmissions
2250/036 . . using alarms
2250/038 . . using cameras
2250/04 . Indicating or measuring of parameters as input values
2250/0404 . . Parameters indicated or measured
2250/0408 . . . Level of content in the vessel
2250/0413 . . . . with floats
2250/0417 . . . . with electrical means
2250/0421 . . . Mass or weight of the content of the vessel
2250/0426 . . . Volume
2250/043 . . . Pressure
2250/0434 . . . . Pressure difference
2250/0439 . . . Temperature
2250/0443 . . . Flow or movement of content
2250/0447 . . . Composition; Humidity
2250/0452 . . . . Concentration of a product
2250/0456 . . . . Calorific or heating value
2250/046 . . . . Humidity
2250/0465 . . . Vibrations, e.g. of acoustic type
2250/0469 . . . Constraints, e.g. by gauges
2250/0473 . . . Time or time periods
2250/0478 . . . Position or presence
2250/0482 . . . Acceleration
2250/0486 . . Indicating or measuring characterised by the location
2250/0491 . . . Parameters measured at or inside the vessel
2250/0495 . . . the indicated parameter is a converted measured parameter
2250/06 . Controlling or regulating of parameters as output values
2250/0605 . . Parameters
2250/061 . . . Level of content in the vessel
2250/0615 . . . Mass or weight of the content of the vessel
2250/0621 . . . Volume
2250/0626 . . . Pressure
2250/0631 . . . Temperature
2250/0636 . . . Flow or movement of content
2250/0642 . . . Composition; Humidity
2250/0647 . . . . Concentration of a product
2250/0652 . . . . Calorific or heating value
2250/0657 . . . . Humidity
2250/0663 . . . Vibrations, e.g. of acoustic type
2250/0668 . . . Constraints, e.g. by jauges
2250/0673 . . . Time or time periods
2250/0678 . . . Position or presence
2250/0684 . . . Acceleration

2250/0689 . . Methods for controlling or regulating
2250/0694 . . . with calculations
2250/07 . Actions triggered by measured parameters
2250/072 . . Action when predefined value is reached
2250/075 . . . when full
2250/077 . . . when empty

2260/00 Purposes of gas storage and gas handling
2260/01 . Improving mechanical properties or manufacturing
2260/011 . . Improving strength
2260/012 . . Reducing weight
2260/013 . . Reducing manufacturing time or effort
2260/015 . . Facilitating maintenance
2260/016 . . Preventing slosh
2260/017 . . by calculation
2260/018 . . Adapting dimensions
2260/02 . Improving properties related to fluid or fluid transfer
2260/021 . . Avoiding over pressurising
2260/022 . . Avoiding overfilling
2260/023 . . Avoiding overheating
2260/024 . . Improving metering
2260/025 . . Reducing transfer time
2260/026 . . by calculation
2260/027 . . Making transfer independent of vessel orientation
2260/028 . . Avoiding unauthorised transfer
2260/03 . Dealing with losses
2260/031 . . due to heat transfer
2260/032 . . . Avoiding freezing or defrosting
2260/033 . . . by enhancing insulation
2260/035 . . of fluid
2260/036 . . . Avoiding leaks
2260/037 . . . Handling leaked fluid
2260/038 . . . Detecting leaked fluid
2260/04 . Reducing risks and environmental impact
2260/042 . . Reducing risk of explosion
2260/044 . . Avoiding pollution or contamination
2260/046 . . Enhancing energy recovery
2260/048 . . Refurbishing
2260/05 . Improving chemical properties
2260/053 . . Reducing corrosion
2260/056 . . Improving fluid characteristics

Purposes or effects

2265/00 Effects achieved by gas storage or gas handling
2265/01 . Purifying the fluid
2265/012 . . by filtering
2265/015 . . by separating
2265/017 . . . different phases of a same fluid
2265/02 . Mixing fluids
2265/022 . . identical fluid
2265/025 . . different fluids
2265/027 . . . with odorizing
2265/03 . Treating the boil-off
2265/031 . . by discharge
2265/032 . . by recovery
2265/033 . . . with cooling
2265/034 . . . . with condensing the gas phase
2265/035 . . . . with subcooling the liquid phase
2265/036 . . . with heating
2265/037 . . . with pressurising
2265/038 . . . with expanding
2265/04 . using an independent energy source, e.g. battery
2265/05 . Regasification
2265/06 . Fluid distribution
2265/061 . . for supply of supplying vehicles
2265/063 . . for supply of refueling stations
2265/065 . . for refueling vehicle fuel tanks
2265/066 . . for feeding engines for propulsion
2265/068 . . Distribution pipeline networks
2265/07 . Generating electrical power as side effect

2270/00 Applications
2270/01 . for fluid transport or storage
2270/0102 . . on or in the water
2270/0105 . . . Ships
2270/0107 . . . . Wall panels
2270/011 . . . Barges
2270/0113 . . . . floating
2270/0115 . . . . immerged
2270/0118 . . . Offshore
2270/0121 . . . . Platforms
2270/0123 . . . . Terminals
2270/0126 . . . . Buoys
2270/0128 . . . . Storage in depth
2270/0131 . . . Submarines
2270/0134 . . placed above the ground
2270/0136 . . . Terminals
2270/0139 . . . Fuel stations
2270/0142 . . placed underground
2270/0144 . . . Type of cavity
2270/0147 . . . . by burying vessels
2270/0149 . . . . by digging cavities
2270/0152 . . . . . Salt caverns
2270/0155 . . . . by using natural cavities
2270/0157 . . . Location of cavity
2270/016 . . . . onshore
2270/0163 . . . . offshore
2270/0165 . . on the road
2270/0168 . . . by vehicles
2270/0171 . . . . Trucks
2270/0173 . . . . Railways
2270/0176 . . . . Buses
2270/0178 . . . . Cars
2270/0181 . . . Airbags
2270/0184 . . . Fuel cells
2270/0186 . . in the air or in space
2270/0189 . . . Planes
2270/0192 . . . Hot air balloons
2270/0194 . . . for use under microgravity conditions, e.g. space
2270/0197 . . . Rockets
2270/02 . for medical applications
2270/025 . . Breathing
2270/05 . for industrial use
2270/0509 . . "Dewar" vessels
2270/0518 . . Semiconductors
2270/0527 . . Supra-conductors
2270/0536 . . . Magnetic resonance imaging
2270/0545 . . Tools
2270/0554 . . Hydraulic applications
2270/0563 . . Pneumatic applications

2270/0572 . . Isostatic presses
2270/0581 . . Power plants
2270/059 . . Mass botteling, e.g. merry belts
2270/07 . for household use
2270/0709 . . Camping gas
2270/0718 . . Aerosols
2270/0727 . . Thermos flasks
2270/0736 . . Capsules, e.g. CO_2
2270/0745 . . Gas bottles
2270/0754 . . Fire extinguishers
2270/0763 . . Fuel cells
2270/0772 . . Inflation devices, e.g. for rescue vests or tyres
2270/0781 . . Diving equipments
2270/079 . . Respiration devices for rescuing