

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

ENGINEERING IN GENERAL

F17 STORING OF DISTRIBUTING GASES OR LIQUIDS (water supply [E03B](#))

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](#))

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| <p>1/00</p> <p>1/002</p> <p>1/005</p> <p>1/007</p> <p>1/02</p> <p>1/04</p> <p>1/06</p> <p>1/08</p> <p>1/10</p> <p>1/12</p> <p>1/14</p> <p>1/16</p> <p>3/00</p> <p>3/005</p> | <p>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; liquefied gas stoves F24C 3/00})</p> <p>• {Storage in barges or on ships}</p> <p>• {Storage of gas or gaseous mixture at high pressure and at high density condition, e.g. in the single state phase}</p> <p>• {Underground or underwater storage}</p> <p>• involving reinforcing arrangements {(F17C 1/14, F17C 1/16 take precedence)}</p> <p>• . . Protecting sheathings</p> <p>• . . . built-up from wound-on bands or filamentary material, e.g. wires</p> <p>• . . Integral reinforcements, e.g. ribs</p> <p>• 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)</p> <p>• with provision for thermal insulation ({F17C 1/14, F17C 1/16 take precedence}); thermal insulation in general F16L 59/00)</p> <p>• constructed of aluminium; constructed of non-magnetic steel</p> <p>• constructed of plastics materials {(shaping of plastics B29C)}</p> <p>Vessels not under pressure</p> <p>• {Underground or underwater containers or vessels (storing in natural or artificial cavities in the earth in general B65G 5/00)}</p> | <p>3/02</p> <p>3/022</p> <p>3/025</p> <p>3/027</p> <p>3/04</p> <p>3/06</p> <p>3/08</p> <p>3/085</p> <p>3/10</p> <p>3/12</p> <p>5/00</p> <p>5/002</p> <p>5/005</p> <p>5/007</p> | <p>• 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})</p> <p>• . . {Land-based bulk storage containers (civil engineering aspects E04H 7/00)}</p> <p>• . . {Bulk storage in barges or on ships (constructive aspects B63B 25/16)}</p> <p>• . . . {Wallpanels for so-called membrane tanks}</p> <p>• . by insulating layers (F17C 3/08 takes precedence)</p> <p>• . . on the inner surface, i.e. in contact with the stored fluid</p> <p>• by vacuum spaces, e.g. Dewar flask (for household use A47J 41/02)</p> <p>• . . . {Cryostats}</p> <p>• by liquid-circulating or vapour-circulating jackets</p> <p>• with provision for protection against corrosion, e.g. due to gaseous acid (protection against corrosion in general C23F)</p> <p>Methods or apparatus for filling containers with liquefied, solidified, or compressed gases under pressures (adding propellants to aerosol containers B65B 31/00)</p> <p>NOTE</p> <p>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.</p> <p>• {Automated filling apparatus}</p> <p>• . {for gas bottles, such as on a continuous belt or on a merry-go-round}</p> <p>• . {for individual gas tanks or containers, e.g. in vehicles (filling with liquid fuel not under pressure, B60S 5/02, B67D 7/00)}</p> |
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5/02	. for filling with liquefied gases	13/081	. . {for large land-based storage vessels (supports for large containers in general B65D 90/12)}
5/04	. . requiring the use of refrigeration, e.g. filling with helium or hydrogen	13/082	. . {for large sea-borne storage vessels (load-accommodating arrangements for ships or waterborne vessels B63B 25/12)}
5/06	. for filling with compressed gases	13/083	. . {for medium-sized mobile storage vessels, e.g. tank vehicles or railway tank vehicles}
6/00	Methods and apparatus for filling vessels not under pressure with liquefied or solidified gases	13/084	. . {for small-sized storage vessels, e.g. compressed gas cylinders or bottles, disposable gas vessels, vessels adapted for automotive use}
7/00	Methods or apparatus for discharging liquefied, solidified, or compressed gases from pressure vessels, not covered by another subclass	13/085	. . . {on wheels (hand carts B62B)}
7/02	. Discharging liquefied gases	13/086	. . {for Dewar vessels or cryostats}
7/04	. . with change of state, e.g. vaporisation	13/087	. . . {used for superconducting phenomena}
9/00	Methods or apparatus for discharging liquefied or solidified gases from vessels not under pressure	13/088	. . {for use under microgravity conditions}
9/02	. with change of state, e.g. vaporisation	13/10	. Arrangements for preventing freezing
9/04	. . Recovery of thermal energy	13/12	. Arrangements or mounting of devices for preventing or minimising the effect of explosion (flame traps A62C 4/00) ; Other safety measures
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)}	13/123	. . {for gas bottles, cylinders or reservoirs for tank vehicles or for railway tank wagons}
11/002	. {for acetylene}	13/126	. . {for large storage containers for liquefied gas (for large containers in general B65D 90/22)}
11/005	. {for hydrogen}		
11/007	. {for hydrocarbon gases, such as methane or natural gas, propane, butane or mixtures thereof [LPG]}	2201/00	Vessel construction, in particular geometry, arrangement or size
13/00	Details of vessels or of the filling or discharging of vessels	2201/01	. Shape
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)}	2201/0104	. . cylindrical
13/002	. {for vessels under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}	2201/0109	. . . with exteriorly curved end-piece
13/003	. . {Means for coding or identifying them and/or their contents}	2201/0114	. . . with interiorly curved end-piece
13/004	. {for large storage vessels not under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}	2201/0119	. . . with flat end-piece
13/005	. {for medium-size and small storage vessels not under pressure (F17C 13/008 and F17C 13/02 - F17C 13/12 take precedence)}	2201/0123	. . . with variable thickness or diameter
13/006	. . {for Dewar vessels or cryostats}	2201/0128	. . spherical or elliptical
13/007	. . . {used for superconducting phenomena (investigating by nuclear magnetic resonance G01N 24/08 ; magnets having superconductive winding H01F 6/00)}	2201/0133	. . toroidal
13/008	. {for use under microgravity conditions}	2201/0138	. . tubular
13/02	. Special adaptations of indicating, measuring, or monitoring equipment (measuring in general G01)	2201/0142	. . conical
13/021	. . {having the height as the parameter}	2201/0147	. . complex
13/023	. . {having the mass as the parameter}	2201/0152	. . . Lobes
13/025	. . {having the pressure as the parameter}	2201/0157	. . . Polygonal
13/026	. . {having the temperature as the parameter}	2201/0161	. . . Honeycomb
13/028	. . {having the volume as the parameter}	2201/0166	. . . divided in several chambers
13/04	. Arrangement or mounting of valves (valves per se F16K ; snap-coupling of nipples F16L 37/00)	2201/0171	. . . comprising a communication hole between chambers
13/045	. . {Automatic change-over switching assembly for bottled gas systems with two (or more) gas containers}	2201/0176	. . variable
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 })	2201/018	. . . with bladders
13/08	. Mounting arrangements for vessels	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	2203/067	. . . . . helically wound
2203/013	. . . in the vessel, e.g. columns	2203/0673	. . . . . Polymers
2203/014	. . Suspension means	2203/0675	. . . . with details of composition
2203/015	. . . Bars	2203/0678	. . . Concrete
2203/016	. . . Cords	2203/068	. . Special properties of materials for vessel walls
2203/017	. . . Magnetic means	2203/0682	. . . with liquid or gas layer
2203/018	. . . by attachment at the neck	2203/0685	. . . flexible
2203/03	. Thermal insulations	2203/0687	. . . superconducting
2203/0304	. . by solid means	2203/069	. . . Break point in the wall
2203/0308	. . . Radiation shield	2203/0692	. . . transparent
2203/0312	. . . . cooled by external means	2203/0695	. . . pre-constrained
2203/0316	. . . . cooled by vaporised gas from the interior	2203/0697	. . . comprising nanoparticles
2203/032	. . . . Multi-sheet layers		
2203/0325	. . . Aerogel	2205/00	Vessel construction, in particular mounting arrangements, attachments or identifications means
2203/0329	. . . Foam	2205/01	. Mounting arrangements
2203/0333	. . . . Polyurethane	2205/0103	. . Exterior arrangements
2203/0337	. . . Granular	2205/0107	. . . Frames
2203/0341	. . . . Perlite	2205/0111	. . . Boxes
2203/0345	. . . Fibres	2205/0115	. . . Dismountable protective hulls
2203/035	. . . . Glass wool	2205/0119	. . . Vessel walls form part of another structure
2203/0354	. . . Wood	2205/0123	. . characterised by number of vessels
2203/0358	. . . in form of panels	2205/0126	. . . One vessel
2203/0362	. . by liquid means	2205/013	. . . Two or more vessels
2203/0366	. . . Cryogen	2205/0134	. . . . characterised by the presence of fluid connection between vessels
2203/037	. . . Water	2205/0138	. . . . . bundled in series
2203/0375	. . by gas	2205/0142	. . . . . bundled in parallel
2203/0379	. . . Inert	2205/0146	. . . . . with details of the manifold
2203/0383	. . . Air	2205/0149	. . . . Vessel mounted inside another one
2203/0387	. . . Cryogen	2205/0153	. . Details of mounting arrangements
2203/0391	. . by vacuum	2205/0157	. . . for transport
2203/0395	. . . Getter	2205/0161	. . . . with wheels
2203/06	. Materials for walls or layers thereof; Properties or structures of walls or their materials	2205/0165	. . . . with handgrip
2203/0602	. . Wall structures; Special features thereof	2205/0169	. . . stackable
2203/0604	. . . Liners	2205/0173	. . . lockable
2203/0607	. . . Coatings	2205/0176	. . . with ventilation
2203/0609	. . . Straps, bands or ribbons	2205/018	. . . Supporting feet
2203/0612	. . . Wall structures	2205/0184	. . . Attachments to the ground, e.g. mooring or anchoring
2203/0614	. . . . Single wall	2205/0188	. . . Hanging up devices
2203/0617	. . . . . with one layer	2205/0192	. . . with external bearing means
2203/0619	. . . . . with two layers	2205/0196	. . . with shock absorbing means
2203/0621	. . . . . with three layers	2205/03	. Fluid connections, filters, valves, closure means or other attachments
2203/0624	. . . . . with four or more layers	2205/0302	. . Fittings, valves, filters, or components in connection with the gas storage device
2203/0626	. . . . Multiple walls	2205/0305	. . . Bosses, e.g. boss collars
2203/0629	. . . . . Two walls	2205/0308	. . . Protective caps
2203/0631	. . . . . Three or more walls	2205/0311	. . . Closure means
2203/0634	. . Materials for walls or layers thereof	2205/0314	. . . . breakable, e.g. with burst discs
2203/0636	. . . Metals	2205/0317	. . . . fusing or melting
2203/0639	. . . . Steels	2205/032	. . . . pierceable
2203/0641	. . . . . Non-magnetic steels	2205/0323	. . . Valves
2203/0643	. . . . . Stainless steels	2205/0326	. . . . electrically actuated
2203/0646	. . . . . Aluminium	2205/0329	. . . . manually actuated
2203/0648	. . . . . Alloys or compositions of metals	2205/0332	. . . . Safety valves or pressure relief valves
2203/0651	. . . . . Invar	2205/0335	. . . . Check-valves or non-return valves
2203/0653	. . . . . Lead	2205/0338	. . . Pressure regulators
2203/0656	. . . . . in form of filaments	2205/0341	. . . Filters
2203/0658	. . . Synthetics	2205/0344	. . . . Sinter type
2203/066	. . . . Plastics		
2203/0663	. . . . . in form of fibers or filaments		
2203/0665	. . . . . radially wound		
2203/0668	. . . . . axially wound		

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	. . Carbene 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 pollutant, e.g. H ₂ S, 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	2227/0346	. . . . by forced circulation, e.g. using a fan
2225/0176	. . . Solids and gas	2227/0348	. . . . Water cooling
2225/0184	. . . Liquids and solids	2227/0351	. . . . using seawater
2225/0192	. . Three-phase, e.g. CO ₂ at triple point	2227/0353	. . . . using cryocooler
2225/03	. characterised by the pressure level	2227/0355	. . . . in a closed loop
2225/031	. . Not under pressure, i.e. containing liquids or solids only	2227/0358	. . . by expansion
2225/033	. . Small pressure, e.g. for liquefied gas	2227/036	. . . . "Joule-Thompson" effect
2225/035	. . High pressure, i.e. between 10 and 80 bars	2227/0362	. . . . in a turbine
2225/036	. . Very high pressure, i.e. above 80 bars	2227/0365	. . . with recovery of heat
2225/038	. . Subatmospheric pressure	2227/0367	. . Localisation of heat exchange
2225/04	. characterised by other properties of handled fluid after transfer	2227/0369	. . . in or on a vessel
2225/041	. . Stratification	2227/0372	. . . . in the gas
2225/042	. . Localisation of the filling point	2227/0374	. . . . in the liquid
2225/043	. . . in the gas	2227/0376	. . . . in wall contact
2225/044	. . . . at several points, e.g. with a device for recondensing gas	2227/0379	. . . . . inside the vessel
2225/045	. . . . with a dip tube	2227/0381	. . . . . integrated in the wall
2225/046	. . . in the liquid	2227/0383	. . . . . outside the vessel
2225/047	. . . . with a dip tube	2227/0386	. . . . . with a jacket
2225/048	. . . in the solid	2227/0388	. . . separate
2227/00	Transfer of fluids, i.e. method or means for transferring the fluid; Heat exchange with the fluid	2227/039	. . . . on the pipes
2227/01	. Propulsion of the fluid	2227/0393	. . . . using a vaporiser
2227/0107	. . by pressurising the ullage	2227/0395	. . . . using a submerged heat exchanger
2227/0114	. . with vacuum injectors, e.g. venturi	2227/0397	. . . characterised by fins
2227/0121	. . by gravity	2227/04	. Methods for emptying or filling
2227/0128	. . with pumps or compressors	2227/041	. . vessel by vessel
2227/0135	. . . Pumps	2227/042	. . . with change-over from one vessel to another
2227/0142	. . . . with specified pump type, e.g. piston or impulsive type	2227/043	. . by pressure cascade
2227/015	. . . . with cooling of the pump	2227/044	. . by purging
2227/0157	. . . Compressors	2227/045	. . by vacuum
2227/0164	. . . . with specified compressor type, e.g. piston or impulsive type	2227/046	. . by even emptying or filling
2227/0171	. . . Arrangement	2227/047	. . by repeating a process cycle
2227/0178	. . . . in the vessel	2227/048	. . by maintaining residual pressure
2227/0185	. . . . comprising several pumps or compressors	2250/00	Accessories; Control means; Indicating, measuring or monitoring of parameters
2227/0192	. . by using a working fluid	2250/01	. Intermediate tanks
2227/03	. Heat exchange with the fluid	2250/03	. Control means
2227/0302	. . by heating	2250/032	. . using computers
2227/0304	. . . using an electric heater	2250/034	. . using wireless transmissions
2227/0306	. . . using the same fluid	2250/036	. . using alarms
2227/0309	. . . using another fluid	2250/038	. . using cameras
2227/0311	. . . . Air heating	2250/04	. Indicating or measuring of parameters as input values
2227/0313	. . . . . by forced circulation, e.g. using a fan	2250/0404	. . Parameters indicated or measured
2227/0316	. . . . . Water heating	2250/0408	. . . Level of content in the vessel
2227/0318	. . . . . using seawater	2250/0413	. . . . with floats
2227/032	. . . . . using geothermal water	2250/0417	. . . . with electrical means
2227/0323	. . . . in a closed loop	2250/0421	. . . Mass or weight of the content of the vessel
2227/0325	. . . by expansion using "Joule-Thompson" effect	2250/0426	. . . Volume
2227/0327	. . . with recovery of heat	2250/043	. . . Pressure
2227/033	. . . using solar energy	2250/0434	. . . . Pressure difference
2227/0332	. . . by burning a combustible	2250/0439	. . . Temperature
2227/0334	. . . by radiation means	2250/0443	. . . Flow or movement of content
2227/0337	. . by cooling	2250/0447	. . . Composition; Humidity
2227/0339	. . . using the same fluid	2250/0452	. . . . Concentration of a product
2227/0341	. . . using another fluid	2250/0456	. . . . Calorific or heating value
2227/0344	. . . . Air cooling	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 gauges
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	. . . . immersed
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	. .	Superconductors
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 bottling, 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