

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B63 SHIPS OR OTHER WATERBORNE VESSELS; RELATED EQUIPMENT

B63B SHIPS OR OTHER WATERBORNE VESSELS; EQUIPMENT FOR SHIPPING

([amphibious vehicles B60F 3/00](#); [air-cushion vehicles B60V](#); arrangements of vessel ventilation, heating, cooling or air conditioning [B63J 2/00](#))

NOTE

In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.

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.

1/00	Hydrodynamic or hydrostatic features of hulls or of hydrofoils (keels B63B 3/38 ; determining hydrodynamic or hydrostatic features B63B 9/00 ; hulls peculiar to submarines B63B 3/13 ; decreasing pitch, roll or like unwanted vessel movements by using foils or acting on ambient water B63B 39/06)	1/12	. . . the hulls being interconnected rigidly { B63B 1/107 takes precedence}
		1/121	. . . . {comprising two hulls (B63B 1/107 takes precedence)}
		2001/123	. . . . {interconnected by a plurality of beams, or the like members only}
2001/005	. {Deflectors for spray, e.g. for guiding spray generated at the bow of a planing vessel underneath the hull}	1/125	. . . . {comprising more than two hulls (B63B 1/107 takes precedence)}
1/02	. deriving lift mainly from water displacement (B63B 1/16 takes precedence)	2001/126	. . . . {comprising more than three hulls}
1/04	. . with single hull	2001/128	. . . . {comprising underwater connectors between the hulls}
1/041	. . . {with disk-shaped hull}	1/14	. . . the hulls being interconnected resiliently {or having means for actively varying hull shape or configuration (collapsible , foldable , inflatable or like vessels B63B 7/00)}
1/042	. . . {the underpart of which being partly provided with channels or the like, e.g. catamaran shaped}	2001/145	. . . . {having means for actively varying hull shape or configuration}
2001/044	. . . {with a small waterline area compared to total displacement, e.g. of semi-submersible type}	1/16	. deriving additional lift from hydrodynamic forces
2001/045	. . . {with means for actively varying hull shape or configuration, e.g. for varying hydrodynamic characteristics}	1/18	. . of hydroplane type
		2001/183	. . . {having non-floating planing surfaces, e.g. attached skis or plate-shaped bodies}
1/047	. . . {with spherical hull or hull in the shape of a vertical ring (freely movable rolling hoops , e.g. gyro wheels for exercising A63B 19/02)}	2001/186	. . . {Sponsons; Arrangements thereof}
1/048	. . . {with hull extending principally vertically}	1/20	. . . having more than one planing surface (B63B 1/22 takes precedence)
1/06	. . . Shape of fore part	2001/201	. . . . {divided by longitudinal chines}
1/063	. . . . {Bulbous bows}	2001/202	. . . . {divided by transverse steps}
2001/066	. . . . {Substantially vertical stems}	2001/203	. . . . {arranged in semi-catamaran configuration}
1/08	. . . Shape of aft part	2001/204	. . . . {arranged on multiple hulls}
1/10	. . with multiple hulls	2001/205	. . . . {the hulls being interconnected rigidly}
2001/102	. . . {Proas, or similar twin-hull vessels with one main hull and one smaller hull or floater, interconnected by one or more outrigger beams or the like}	2001/206	. . . . . {comprising two hulls, e.g. catamarans}
		2001/207	. . . . . {comprising more than two hulls}
		2001/208	. . . . . {comprising three hulls, e.g. trimarans}
1/105	. . . {comprising a cockpit surrounded and pivotally supported by at least three floats}	2001/209	. . . . . {the hulls being interconnected resiliently, or having means for actively varying hull shape or configuration}
1/107	. . . {Semi-submersibles; Small waterline area multiple hull vessels and the like, e.g. SWATH}	1/22	. . . with adjustable planing surfaces

1/24	. . of hydrofoil type { controlling attitude or depth of underwater vessels by hydrofoils or the like B63G 8/18 }	3/13	. Hulls built to withstand hydrostatic pressure when fully submerged, e.g. submarine hulls
1/242	. . . { Mounting, suspension of the foils B63B 1/30 takes precedence }	3/14	. Hull parts (hull armour B63B 3/10)
1/244	. . . { Safety systems, e.g. when striking an object }	3/142	. . { Connections between the shell and deck }
1/246	. . . { Arrangements of propulsion elements (propulsion elements in general B63H 5/00, propulsion by jets in general B63H 11/00) }	2003/145	. . { Frameworks, i.e. load bearing assemblies of trusses and girders interconnected at nodal points }
1/248	. . . { Shape, hydrodynamic features, construction of the foil }	2003/147	. . { Moon-pools, e.g. for offshore drilling vessels }
1/26	. . . having more than one hydrofoil (B63B 1/28 takes precedence)	3/16	. . Shells (ports or closures therefor B63B 19/00)
1/28	. . . with movable hydrofoils	3/18	. . . characterised by being formed predominantly of parts that may be developed into plane surfaces
2001/281	. . . . {movable about an axis substantially parallel to the flow direction }	3/185	. . . . {comprising only flat panels }
1/283	. . . . {movable around a vertical axis, e.g. for steering }	3/20	. . . of double type
1/285	. . . . {changing the angle of attack or the lift of the foil }	3/22	. . . with corrugations
1/286	. . . . . {using flaps }	3/24	. . . Means for diminishing external ridges of protrusions
1/288	. . . . . {using gas exhaust through the foil }	3/26	. . Frames
1/30	. . . . retracting or folding { (B63B 1/244 takes precedence) }	2003/265	. . . { comprising open profiles, e.g. U- or gutter-shaped, and forming substantially closed channels together with the plate to which they are attached }
1/32	. Other means for varying the inherent hydrodynamic characteristics of hulls	3/28	. . . of transverse type; Stringers
1/322	. . { using aerodynamic elements, e.g. aerofoils producing a lifting force (flying boats B64C 35/00) }	3/30	. . . . Bilge knees; Beam knees
2001/325	. . { Interceptors, i.e. elongate blade-like members projecting from a surface into the fluid flow substantially perpendicular to the flow direction, and by a small amount compared to its own length }	3/32	. . . Web frames; Web beams
2001/327	. . { using magneto-hydrodynamic forces }	3/34	. . . of longitudinal type; Bulkhead connections
1/34	. . by reducing surface friction	3/36	. . . Combined frame systems
2001/345	. . . { by ejecting friction reducing solids or liquids, e.g. polymers }	3/38	. . Keels (movable keels B63B 41/00)
1/36	. . . using mechanical means	2003/382	. . . { adapted for housing energy accumulators, e.g. batteries }
1/38	. . . using air bubbles or air layers { gas filled volumes (waterborne vessels travelling on air cushions B60V 3/06) }	2003/385	. . . { with means for controlling heeling or rolling motions, or lift, e.g. flaps, by changing geometry, or by ballast displacement }
2001/382	. . . . {by making use of supercavitation, e.g. for underwater vehicles }	2003/387	. . . { adapted for housing propulsion plant elements }
2001/385	. . . . {using exhaust gas }	3/40	. . Stern posts; Stern frames
2001/387	. . . . {using means for producing a film of air or air bubbles over at least a significant portion of the hull surface }	3/42	. . Shaft brackets
1/40	. . by diminishing wave resistance	2003/425	. . . { having features not related to structural construction, e.g. hydrodynamic properties or bearings }
3/00	Constructions of hulls (non-metallic hulls B63B 5/00; designing, building, maintaining or repairing methods B63B 9/00)	3/44	. . Bilge keels (stabilising aspect B63B 39/06)
3/02	. Hulls assembled from prefabricated sub-units	3/46	. . Stems
3/04	. . with permanently-connected sub-units	3/48	. . Decks (planking B63B 5/06)
3/06	. . . the sub-units being substantially identical	2003/485	. . . { movably connected to hull or superstructure }
3/08	. . with detachably-connected sub-units	3/50	. . . of vaulted type
2003/085	. . . { Multiple hull vessels, e.g. catamarans, assembled from detachably-connected sub-units }	3/52	. . . Pillars; Deck girders
3/09	. Hulls constructed of non-magnetic metal	3/54	. . . Hatch openings
3/10	. Armoured hulls	3/56	. . Bulkheads; Bulkhead reinforcements (arrangements of watertight doors B63B 43/24)
3/12	. Frameless hulls	3/58	. . . with flat plating
		3/60	. . . with curved or corrugated plating
		3/62	. . Double bottoms; Tank tops
		3/64	. . . Keelsons
		3/66	. . Gratings
		3/68	. . Panellings; Linings, e.g. for insulating purposes
		3/70	. . Reinforcements for carrying localised loads, e.g. propulsion plant, guns
		5/00	Hulls characterised by their construction of non-metallic material
		5/02	. made predominantly of wood
		5/04	. . Carcasses
		5/06	. . Decks; Shells

5/065	. . . {caulking decks (mortise chisels for wood B25D 3/00)}	9/065	. . {for floating offshore platforms (grounded platforms E02B 17/00)}
5/08	. . . with single-layer planking	2009/067	. . . {for assembling offshore structures, e.g. in situ , using buoyancy forces for supporting the structure itself, or part of it, e.g. using barges}
5/10	. . . with multiple-layer planking	9/08	. Determining vessel properties with respect to stability or balance
5/12	. made predominantly of wood with metal reinforcement, i.e. composite construction	11/00	Interior subdivision of hulls (bulkhead space construction B63B 3/56)
5/14	. made predominantly of concrete, e.g. reinforced	11/02	. Arrangement of bulkheads, e.g. defining cargo spaces
5/16	. . monolithic	11/04	. Constructional features of bunkers, {e.g. structural fuel tanks,} or ballast tanks, e.g. with elastic walls ({tanks for fuel or the like not forming subdivisions of the hull B63B 17/0027 ; } cleaning of tanks B63B 57/00)
5/18	. . built-up from elements	11/06	. Propeller-shaft tunnels
5/20	. . . in combination with elements of other materials	13/00	Conduits for emptying or ballasting; Self-bailing equipment; Scuppers (draining means for hatches B63B 19/26; centrifugal bilge-water separators B04; {arrangements of installations for treating ballast water B63J 4/002; } pipes in general F16L)
5/22	. . with reinforcing members external to shell	2013/005	. {Sea chests}
5/24	. made predominantly of plastics ({surf boards B63B 35/7909 })	13/02	. Ports for passing water through vessels' sides ({jet propulsors with clogging prevention means B63H 11/01 })
2005/242	. . {made of a composite of plastics and other structural materials, e.g. wood or metal}	15/00	Superstructures {, deckhouses, wheelhouses or the like}; Arrangements or adaptations of masts {or spars, e.g. bowsprits} (loading or unloading equipment B63B 27/00; masts and staying in general E04H; sails, running rigging B63H; {mounting ladders or the like on masts B63B 29/205})
2005/245	. . . {made of a composite of plastics and metal}	2015/0008	. {Bowsprits}
2005/247	. . . {made of a composite of plastics and wood}	2015/0016	. {Masts characterized by mast configuration or construction}
7/00	Collapsible, foldable, inflatable or like vessels (foldable pontoons B63B 35/36)	2015/0025	. . {Bipodded masts, e.g. A-type masts}
2007/003	. {with foldable members}	2015/0033	. . {Multipodded masts, e.g. tripod-type}
2007/006	. {comprising nestable elements}	2015/0041	. . {Telescoping masts}
7/02	. comprising only rigid parts	2015/005	. . {with means for varying mast position or orientation with respect to the hull}
7/04	. . sectionalised	2015/0058	. . . {comprising active mast inclination means}
7/06	. having parts of non-rigid material	2015/0066	. . . {Inclinable masts with passive righting means, e.g. counterbalancing means}
2007/065	. . {comprising flexible pockets for receiving removable floaters}	2015/0075	. . . {with mast foot adapted for being moved, e.g. athwartship}
7/08	. . inflatable	15/0083	. {Masts for sailing ships or boats}
7/082	. . . {having parts of rigid material}	2015/0091	. . {comprising means for silencing rope noise}
7/085	. . . {Accessories or mountings specially adapted therefor, e.g. seats, sailing kits, motor mountings}	15/02	. Staying of masts or of other superstructures
7/087	. . . . {Motor mountings, e.g. transom panels for outboard motors}	17/00	Vessels parts, details, or accessories, not otherwise provided for {(vehicle fittings for preventing or indicating unauthorised use or theft of vehicles in general B60R 25/00; propeller guards, line cutters or other means for protecting propellers or rudders B63H 5/165; protection of power legs of outboard propulsion units B63H 20/36; locking devices for boats, surfboards or parts or accessories thereof E05B 73/007)}
9/00	Methods of designing, building, maintaining, converting, refitting, repairing, or determining properties of vessels, not otherwise provided for (shuttering for building concrete vessels E04G)	2017/0009	. {Methods or devices specially adapted for preventing theft, or unauthorized use of vessels, or parts or accessories thereof, other than by using locks}
9/001	. {Methods of designing, or determining properties of vessels by means of analytical modelling, e.g. computational}		
9/002	. . {using fluid dynamics analysis, e.g. computational fluid dynamics}		
9/003	. . {using structure analysis, e.g. finite elements}		
2009/005	. {Methods for dismantling hulls, or elements of ships or other waterborne vessels, e.g. floating offshore structures}		
2009/006	. . {for dismantling hulls, or structural elements}		
2009/007	. . {for unshipping or dismantling equipment or non-structural elements, e.g. propellers, rudders or prime movers}		
2009/008	. {Methods for repairing hulls or structural elements of ships or other waterborne vessels, e.g. floating offshore structures}		
9/02	. using towing tanks or model basins for designing {(arrangements in or on ship testing tanks or water tunnels G01M 10/00)}		
2009/025	. . {using ice model basins; using non-refrigerated towing tanks or model basins with floating ice covers simulated by other means, e.g. wax}		
9/04	. Rebuilding ships, e.g. increasing tonnage		
9/06	. Methods of building hulls		
9/062	. . {by folding (foldable vessels B63B 7/00)}		

- 17/0018 . {Arrangements or devices specially adapted for facilitating access to underwater elements, e.g. to propellers (retractable propellers [B63H 5/125](#); tilting outboard propulsion units [B63H 20/08](#)); Externally attached cofferdams or the like (caissons adapted to laying foundations [E02D 23/00](#) - [E02D 27/00](#))}
- 17/0027 . {Tanks for fuel or the like (constructional features of bunkers [B63B 11/04](#)); Accessories therefor, e.g. tank filler caps (fuel tanks for vehicles in general [B60K 15/03](#); cargo tanks [B63B 25/08](#); cleaning of tanks [B63B 57/00](#); handling of liquids for use in power plants [B63H 21/38](#))}
- 17/0036 . . {Arrangements for minimizing pollution by accidents (associated with cargo tanks [B63B 25/082](#))}
- 2017/0045 . {Caps, hoods, or the like devices for protective purposes, not otherwise provided for}
- 2017/0054 . {Rests or supports for movable ship-borne equipment}
- 2017/0063 . . {Boom rests, i.e. props for main sail booms, derricks, or the like}
- 2017/0072 . {Seaway compensators}
- 17/0081 . {Vibration isolation or damping elements or arrangements, e.g. elastic support of deck-houses (mounting of propulsion plant or unit [B63H 21/30](#); vibration dampers, suppression of vibration in systems [F16F](#))}
- 2017/009 . {Wave breakers, breakwaters, splashboards, or the like}
- 17/02 . Awnings {, including rigid weather protection structures, e.g. sunroofs; Tarpaulins; Accessories for awnings or tarpaulins}
- 17/023 . . {Hatchway tents, e.g. for weather protection of cargo during loading or unloading}
- 2017/026 . . {Rigid awnings, or sunroofs}
- 17/04 . Stanchions; Guard-rails {; Bulwarks or the like}
- 2017/045 . . {Bulwarks, or the like}
- 17/06 . Refuse discharge, e.g. for ash ({arrangements of installations for treating refuse or sludge, e.g. tank washing sludge [B63J 4/00](#); } removal of domestic or like refuse [B65F](#))}
- 19/00 Arrangements or adaptations of ports, doors, windows, port-holes, or other openings or covers (scuppers [B63B 13/00](#); arrangements of watertight doors in bulkheads [B63B 43/24](#))**
- 2019/0007 . {Ship's windows}
- 2019/0015 . . {Bull's eyes, or the like ship's windows}
- 2019/0023 . . . {Pivotal bull's eyes with central pivoting axis}
- 2019/003 . . . {Pivotal bull's eyes with peripheral hinge axis}
- 2019/0038 . . {Ship's windows, other than bull's eyes}
- 2019/0046 . . . {Fixed ship's windows, other than bull's eyes}
- 2019/0053 . {Locking means for ports, doors, windows, covers, or the like, e.g. providing for watertight closure when locked}
- 2019/0061 . . {comprising pivotally supported threaded locking bolts}
- 2019/0069 . . {comprising movable positive fit locking members, e.g. swivelling locking clips, or dogs}
- 2019/0076 . . . {comprising multiple positive fit locking members arranged for simultaneous locking action}
- 2019/0084 {with mechanical drive for effecting simultaneous locking action}
- 2019/0092 . {Fly screens, or the like protection devices against insects, e.g. for insertion into bull's eyes openings}
- 19/02 . Clear-view screens; {Windshields (canopies connected to windshields [B63B 17/02](#))}
- 19/04 . Air-catching equipment related to windows or port-holes ([ventilation B63J 2/00](#))
- 19/06 . . readily detachable
- 19/08 . Ports or like openings in vessels' sides {or at the vessels' bow or stern (forming ramps when open [B63B 27/143](#))}
- 2019/083 . . {Bow ports, e.g. for ferries}
- 2019/086 . . {Stern ports, e.g. for ferries or Ro-Ro-vessels}
- 19/10 . . Coal ports
- 19/12 . Hatches; Hatchways (hatch coamings [B63B 3/54](#))
- 19/14 . . Hatch covers (opening devices in general [E05F](#))
- 2019/145 . . . {with means for adjusting size, e.g. width}
- 19/16 . . . with detachable boards
- 19/18 . . . slidable
- 2019/185 {with sliding bearings}
- 19/19 . . . foldable
- 19/197 actuated by fluid pressure
- 19/203 actuated by cables or the like
- 19/21 . . . of roll-up type
- 19/22 . . Hatch beams
- 19/24 . . Hatch fastenings, e.g. cleats
- 2019/245 . . . {Loose or removable fastening members specially adapted for fastening hatch covers to coamings, sills, or the like}
- 19/26 . . Gaskets; Draining means
- 19/28 . . Other safety means
- 21/00 Tying-up; Shifting, towing, or pushing equipment; Anchoring ({of buoys [B63B 22/04](#)}; dynamic anchoring [B63H 25/00](#); equipment for shipping on coasts, in harbours or on other fixed marine structures, e.g. for landing purposes, [E02B](#))**
- WARNING**
- Group [B63H 21/00](#) is no longer used for classification of adaptations of ropes, hawsers, or the like, or parts thereof. Documents are in the process of being reorganised to [B63B 21/20](#)
- 2021/001 . {Mooring bars, yokes, or the like, e.g. comprising articulations on both ends}
- 2021/002 . . {Yokes, or the like}
- 2021/003 . {Mooring or anchoring equipment, not otherwise provided for}
- 2021/004 . . {Quick release elements in mooring connections}
- 2021/005 . . {Resilient passive elements to be placed in line with mooring or towing chains, or line connections, e.g. dampers or springs}
- 2021/006 . . {Suction cups, or the like, e.g. for mooring, or for towing or pushing}
- 2021/007 . . {Remotely controlled subsea assistance tools, or related methods for handling of anchors or mooring lines, e.g. using remotely operated underwater vehicles for connecting mooring lines to anchors}
- 2021/008 . . {Load monitors}
- 2021/009 . . {Drift monitors}
- 21/02 . Magnetic mooring equipment
- 21/04 . Fastening or guiding equipment for chains, ropes, hawsers, or the like {(means for fastening cables or ropes in general [F16G 11/00](#))}

21/045	. . {T-shaped cleats}	2021/504	. . . {comprising suppressors for vortex induced vibrations}
21/06	. . Bollards	2021/505	. . {Methods for installation or mooring of floating offshore platforms on site}
21/08	. . Clamping devices (in general F16B ; {means for fastening cables or ropes to one another or to other objects in general F16G 11/00 })	21/507	. . {with mooring turrets}
21/10	. . Fairleads	21/508	. . . {connected to submerged buoy (mooring buoys per se B63B 22/02)}
21/12	. . Rat guards	21/54	. . Boat-hooks or the like {, e.g. hooks detachably mounted to a pole}
21/14	. . Hawse-holes; Hawse-pipes; Hawse-hole closures	21/56	. . Towing or pushing equipment (tugs B63B 35/66 {; towing devices for waterskis or watersledges B63B 35/815 })
21/16	. . using winches (winches per se B66D)	2021/563	. . {Pushing equipment}
21/18	. . Stoppers for anchor chains {(anchor capstans B66D 1/72)}	2021/566	. . {comprising running ropes or chains, e.g. endless, driven by ground-borne equipment}
21/20	. . Adaptations of chains, ropes, hawsers, or the like, or of parts thereof chains, ropes or hawsers in general, see the relevant subclasses, e.g. F16G {or D07B }	21/58	. . Adaptations of hooks for towing; Towing-hook mountings (hooks in general F16B)
2021/203	. . {Mooring cables or ropes, hawsers, or the like; Adaptations thereof}	21/60	. . . Quick releases
2021/206	. . {Weights attached to mooring lines or chains, or the like; Arrangements thereof}	21/62	. . characterised by moving of more than one vessel (rigid interconnections between pontoons B63B 35/38)
21/22	. . Handling or lashing of anchors	21/64	. . Equipment for towing or pushing vessels by vehicles or beings moving forward on ground-based paths along water way (boat-hooks or the like B63B 21/54 ; shore- or ground-based equipment per se , e.g. vehicles, rails, see the relevant classes)
2021/222	. . {Buoyancy elements adapted or used for manipulating anchors, e.g. buoyancy elements built-in, or connected to the anchor, and used for lifting or up-righting the same}	21/66	. . Equipment specially adapted for towing underwater objects or vessels, e.g. fairings for tow-cables ({paravanes for dragging fishing nets A01K 73/02 ; } salvaging underwater vessels or objects B63C 7/00 ; towed underwater vessels B63G 8/42)
2021/225	. . {Marker buoys for indicating position of an anchor, or for providing a line connection between the anchor and the water surface}	21/663	. . . {Fairings}
21/227	. . {Stowing the anchor inside the vessel by hauling-in through an aperture in the side walls, stern or bottom}	2021/666	. . . {for intermittent towing}
21/24	. . Anchors	22/00	Buoys ({floating decoys, e.g. for waterfowl A01M 31/06 ; } means for indicating the location of underwater objects B63C 7/26 ; life-buoys, e.g. rings B63C 9/08 ; {mountings of acoustic transducer in underwater equipment, e.g. sonobuoys G10K 11/006 ; electric cables supported on or from floats H02G 9/12 })
21/243	. . {foldable or capable of being disassembled}	22/003	. . {adapted for being launched from an aircraft or water vehicle;., e.g. with brakes deployed in the water}
2021/246	. . {comprising elements yielding at a predetermined load, e.g. shear bolts}	2022/006	. . {specially adapted for measuring or watch purposes}
21/26	. . securing to bed	22/02	. . specially adapted for mooring a vessel
2021/262	. . . {by drag embedment}	22/021	. . {and for transferring fluids, e.g. liquids (container type buoys having means to selectively release contents, not adapted for mooring a vessel B63B 22/26)}
2021/265	. . . {by gravity embedment, e.g. by dropping a pile-type anchor from a certain height}	22/023	. . . {submerged when not in use (container type buoys submerged when not in use, not adapted for mooring a vessel B63B 22/28 ; connected to turret B63B 21/508)}
2021/267	. . . {by penetration of anchor into the sea bed using water jets, e.g. by ground or sand fluidisation}	22/025	. . . {and comprising a restoring force in the mooring connection provided by means of weight, float or spring devices}
21/27	. . . by suction	22/026	. . . {and with means to rotate the vessel around the anchored buoy (turrets B63B 21/507)}
21/28	. . . driven in by explosive charge	2022/028	. . {submerged, e.g. fitting into ship-borne counterpart with or without rotatable turret, or being releasably connected to moored vessel}
21/29	. . . by weight, e.g. flukeless weight anchors		
21/30	. . rigid when in use {(B63B 21/28 takes precedence)}		
21/32	. . . with one fluke		
21/34	. . . with two or more flukes		
21/36	. . . . foldable		
21/38	. . pivoting when in use {(B63B 21/28 takes precedence)}		
21/40	. . . with one fluke		
21/42	. . . . of ploughshare type		
21/44	. . . with two or more flukes		
21/46	. . with variable {, e.g.} sliding, connection to the chain {, especially for facilitating the retrieval of the anchor}		
21/48	. . Sea-anchors; Drogues		
21/50	. . Anchoring arrangements {or methods} for special vessels, e.g. for floating drilling platforms or dredgers		
2021/501	. . {by means of articulated towers, i.e. slender substantially vertically arranged structures articulated near the sea bed}		
21/502	. . {by means of tension legs}		

22/04	• {Fixations or other} anchoring arrangements	23/46	• . . . in the boat
22/06	• . with means to cause the buoy to surface in response to a transmitted signal { (B63B 22/023 takes precedence) }	23/48	• . using winches for boat handling (winches per se B66D)
22/08	• . having means to release or urge to the surface a buoy on submergence thereof, e.g. to mark location of a sunken object	23/50	• . . with tensioning gear
22/10	• . . Water soluble or water weakened means, i.e. buoy released by buoy-to-object securing means being destroyed on contact with water	23/52	• . . with control of winches from boat
22/12	• . . the surfacing of the buoy being assisted by a gas released or generated on submergence of the buoy	23/54	• . with trimming equipment
22/14	• . . Buoy-to-object securing means responsive to hydrostatic pressure	23/56	• . . controlled from boat
22/16	• specially adapted for marking a navigational route (signalling or lighting devices B63B 45/00)	23/58	• . with tackle engaging or release gear
22/163	• . {comprising a bell or other audible signal}	23/60	• . Additional connections between boat and davits
22/166	• . {comprising a light}	23/62	• Fastening or storing of boats on deck
22/18	• having means to control attitude or position, e.g. reaction surfaces or tether	23/64	• . Lashings; Covers
22/20	• . Ballast means	23/66	• . Blocks; Chocks
22/22	• Inflatable buoys with gas generating means (B63B 22/12 takes precedence)	23/68	• . . for stacking boats
22/24	• container type, i.e. having provision for the storage of material	23/70	• Condition-responsive handling equipment, e.g. automatic release of boat from lowering tackle upon contact with water
22/26	• . having means to selectively release contents, e.g. swivel couplings ({B63B 22/021 takes precedence; } arrangements between ships and off-shore structures for loading or unloading, using pipe lines B63B 27/34; pipe joints or couplings, in general F16L)	25/00	Load-accommodating arrangements, e.g. stowing, trimming; Vessels characterised thereby (trimming otherwise than by cargo division, e.g. by use of ballast B63B 43/06, B63B 43/08; constructive aspects of cargo spaces B63B 11/00; hatches, hatchways B63B 19/12)
22/28	• . submerged when not in use {(B63B 22/023 takes precedence)}	25/002	• {for goods other than bulk goods (detachable decks B63B 25/18; palletised articles B63B 25/22; frozen goods B63B 25/26; deck loads B63B 25/28)}
23/00	Equipment for handling lifeboats or the like	25/004	• . {for containers (B63B 25/28 takes precedence)}
23/02	• Davits, i.e. devices having arms for lowering boats by cables or the like	25/006	• . {for floating containers, barges or other floating cargo (for transporting marine vessels B63B 35/40)}
23/04	• . with arms pivoting on substantially horizontal axes, e.g. gravity type	25/008	• . {for wheeled cargo (B63B 25/20 takes precedence)}
23/06	• . . with actual pivots	25/02	• for bulk goods
23/08	• . . . the arms being articulated	2025/022	• . {comprising flexible receptacles for bulk cargo, e.g. bladders for liquid cargo inserted in tanks}
23/10	• . . . with positive drive of the arms	2025/025	• . {Vessels adapted for particular combinations of bulk cargo}
23/12	• . . . with simulated pivots	2025/027	• . . {Ore-bulk-oil carriers}
23/14	• . . . using linkages	25/04	• . solid
23/16	• . . . using guide tracks	25/06	• . . for cereals
23/18	• . with arms pivoting on substantially vertical axes	25/08	• . fluid {(constructional features of bunkers B63B 11/04; tanks for fuel or the like not forming bunkers B63B 17/0027)}
23/20	• . . Davits with single arms (cranes in general B66C)	25/082	• . . {Arrangements for minimizing pollution by accidents (associated with tanks for fuel or the like not forming bunkers B63B 17/0036)}
23/22	• . . . Slings or the like therefor	2025/085	• . . {comprising separation membranes}
23/24	• . . Slewing equipment therefor	2025/087	• . . {comprising self-contained tanks installed in the ship structure as separate units}
23/26	• . with rectilinear translation of boat before lowering	25/10	• . . open to ambient air
23/28	• Devices for projecting or releasing boats for free fall	25/12	• . . closed
23/30	• Devices for guiding boats to water surface	25/14	• . . . pressurised
23/32	• . Rigid guides, e.g. having arms pivoted near waterline	25/16	• . . . heat-insulated (insulating panelling B63B 3/68; heating or cooling B63J)
23/34	• . Guiding means for lowering by cables, e.g. for listing ships	25/18	• Detachable decks
23/36	• . . Skid fenders	25/20	• . for motor vehicles or the like
23/38	• Transport of boats to davits or the like	25/22	• for palletised articles
23/40	• Use of lowering or hoisting gear	25/24	• Means for preventing unwanted cargo movement, e.g. dunnage
23/42	• . with braking equipment	2025/245	• . {of wheeled cargo, e.g. vehicle retainers}
23/44	• . . on the ship	25/26	• for frozen goods
		25/28	• for deck loads

2025/285	. . {Means for securing deck containers against unwanted movements}	2029/027	. . {Removable walls, e.g. for temporarily erecting cabin spaces in ship hold, or for subdividing living areas into smaller units; Fittings for removable wall panels}
27/00	Loading or unloading cargo or passengers (self-discharging barges or lighters B63B 35/30; shore-based B65G {elevators, escalators or moving walkways per se B66B; floating cranes B66C 23/52; loading or unloading devices per se, see the relevant subclasses, e.g. B65G, B66C, B67D})	29/04	. . Furniture peculiar to vessels (floatable furniture B63C 9/30)
27/02	. {with intermittent action}	2029/043	. . . {Seats; Arrangements thereof on vessels}
27/04	. . Ships' derricks, i.e. employing ships' masts (derricks in general B66C)	2029/046	. . . {Tables, e.g. foldable or stowable}
27/06	. . . {with slewing force exerted at pivoted end}	29/06	. . . Fastening to floors
27/08	. . using winches (winches per se B66D)	29/08	. . . Storm guards on tables, e.g. fiddles
27/10	. . using cranes (cranes per se B66C)	29/10	. . . Berths; Mounting ladders therefor
27/12	. . . of gantry type	29/12	. . . Self-levelling mountings
27/14	. . Ramps; Gangways or other outboard ladders (inboard ladders B63B 29/20 {; land-based bridges giving access to ships E01D 15/24 }); {Pilot lifts}	29/14	. . Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships
2027/141	. . . {telescopically extendable}	2029/145	. . . {Collapsible or non-permanent privacy rooms, e.g. closets or changing rooms}
27/143	. . . {Ramps}	29/16	. . Soil water discharges {arrangements of installations for treating waste water or sewage B63J 4/006 }
2027/145	. . . . {Inflatable ramps}	29/18	. . Arrangements or adaptations of swimming pools
27/146	. . . {Pilot ladders or similar outboard ladders, e.g. bathing ladders; Pilot lifts}	29/20	. . Arrangements or adaptations of ladders (mounting ladders for berths B63B 29/10)
2027/148	. . . . {Pilot lifts}	29/205	. . {on masts}
27/16	. . using lifts or hoists (elevators per se B66B {Pilot lifts B63B 27/14 })	29/22	. . Galleys
2027/165	. . . {Deployment or recovery of underwater vehicles using lifts or hoists}	35/00	Vessels or like floating structures adapted for special purposes (vessels characterised by load-accommodating arrangements B63B 25/00; fire-fighting vessels A62C 29/00; submarines, mine-layers or mine-sweepers B63G; large containers for use in or under water B65D 88/78; {Advertising on ships or other floating means G09F 21/18})
27/18	. . using cableways, e.g. with breeches-buoys (cableways per se B65G)	2035/001	. {for beach loading or unloading, e.g. landing crafts}
27/20	. {with continuous action}	2035/002	. {for inland waters, e.g. for use on canals or rivers}
27/22	. . of conveyors, e.g. of endless-belt or screw-type (arrangements of devices with throwing action B63B 27/26 ; arrangements of chutes B63B 27/28 ; conveyors per se B65G)	35/003	. {for transporting very large loads, e.g. offshore structure modules (construction methods for artificial islands mounted on piles E02B 17/00 ; for transporting marine vessels B63B 35/40 ; docks B63C 1/00)}
27/24	. . Loading or unloading fluids	2035/004	. {Passenger vessels, e.g. cruise vessels or the like}
27/25	. . . {Arrangement of ship-based loading or unloading equipment} for fluidised bulk material	2035/005	. {Search and rescue [SAR] vessels}
27/26	. . using devices with throwing action (devices with throwing action per se B65G)	2035/006	. {Unmanned surface vessels, e.g. remotely controlled}
27/28	. . using chutes (chutes per se B65G)	2035/007	. . {autonomously operating}
27/30	. {Arrangement of ship-based loading or unloading equipment} for transfer at sea between ships or between ships and off-shore structures	2035/008	. . {remotely controlled}
27/32	. . using cableways	2035/009	. {Wind propelled vessels comprising arrangements, installations or devices specially adapted therefor, other than wind propulsion arrangements, installations, or devices, such as sails, running rigging, or the like, and other than sailboards or the like or related equipment}
27/34	. . using pipe-lines {(anchoring arrangements for special vessels with mooring turrets B63B 21/507 ; buoys specially adapted for mooring a vessel and for transferring fluids, e.g. liquids B63B 22/021)}	35/03	. . Pipe-laying vessels (laying pipes under water F16L 1/12)
27/36	. {Arrangement of ship-based loading or unloading equipment} for floating cargo (devices for facilitating retrieval of floating objects per se B66C 13/02)	35/04	. . Cable-laying vessels
29/00	Accommodation for crew or passengers not otherwise provided for	35/06	. . for moving cable-ends from ship to shore
29/02	. Cabins or other living spaces; Construction or arrangement thereof	35/08	. . Ice-breakers, or other vessels or floating structures for operation in ice-infested waters; Ice-breakers, or other vessels or floating structures having equipment specially adapted therefor
2029/022	. . {Bathing platforms}		NOTE
29/025	. . {Modular or prefabricated cabins}		{Documents concerning vessels, or floating structures adapted at the same time for an other particular purpose are also classified in the respective other particular groups of

B63B

B63B 35/08
(continued)

- [B63B 35/00](#), e.g. floating buildings, stores, drilling platforms or workshops for operation in ice infested waters are also classified in [B63B 35/44](#)
- 35/083 . . {Ice-breakers ([B63B 35/10](#), [B63B 35/12](#) take precedence)}
 - 35/086 . . {Vessels for displacing icebergs, or related methods (tugs in general [B63B 35/66](#))}
 - 35/10 . . having forced pitching or rolling equipment
 - 35/12 . . having ice-cutters
 - 35/14 . Fishing vessels ([fishing A01K 69/00 - A01K 97/00](#))
 - 35/16 . . Trawlers
 - 35/18 . . . adapted to dragging nets aboard
 - 35/20 . . . adapted to hoisting nets aboard
 - 35/22 . . Whale catchers; Whale factory vessels
 - 35/24 . . Fish holds
 - 35/26 . . . for live fish
 - 35/28 . Barges or lighters {(underwater-towed barges [B63G 8/42](#); for transporting logs [B63B 35/62](#))}
 - 35/285 . . {Flexible barges, e.g. bags}
 - 35/30 . . self-discharging
 - 35/301 . . . {discharging by turning over part of or the whole barge}
 - 35/303 . . . {discharging by suction, pressing or washing}
 - 35/305 . . . {discharging by mechanical means}
 - 35/306 . . . {discharging through dump-gates on the bottom or sides of the barge}
 - 35/308 . . . {Split barges interconnected hingedly or slidably}
 - 35/32 . for collecting pollution from open water
- NOTE**
- If the apparatus for collecting pollution from open water is of interest apart from ship construction aspects, it is also classified in group [E02B 15/00](#)
- 35/34 . Pontoons ([floating bridges E01D 15/14](#))
 - 35/36 . . foldable
 - 35/38 . . Rigidly-interconnected pontoons
 - 35/40 . for transporting marine vessels {(load accommodation for floating barges and the like [B63B 25/006](#))}
 - 2035/405 . . {for carrying submarines}
 - 35/42 . . with adjustable draught
 - 35/44 . Floating buildings, stores, drilling platforms, or workshops, e.g. carrying water-oil separating devices {(construction methods for floating offshore platforms [B63B 9/065](#))}
 - 35/4406 . . {Articulated towers, i.e. substantially floating structures comprising a slender tower-like hull anchored relative to the marine bed by means of a single articulation, e.g. using an articulated bearing}
 - 35/4413 . . {Floating drilling platforms, e.g. carrying water-oil separating devices}
 - 2035/442 . . {Spar-type semi-submersible structures, i.e. shaped as single slender, e.g. substantially cylindrical or trussed vertical bodies}
 - 2035/4426 . . {Stationary floating buildings for human use, e.g. floating dwellings or floating restaurants}
 - 2035/4433 . . {Floating structures carrying electric power plants}
 - 2035/444 . . . {for converting combustion energy into electric energy}
 - 2035/4446 . . . {for converting nuclear energy into electric energy}
 - 2035/4453 . . . {for converting solar energy into electric energy}
 - 2035/446 . . . {for converting wind energy into electric energy}
 - 2035/4466 . . . {for converting water energy into electric energy, e.g. from tidal flows, waves or currents}
 - 2035/4473 . . {Floating structures supporting industrial plants, such as factories, refineries, or the like}
 - 2035/448 . . {Floating hydrocarbon production vessels, e.g. Floating Production Storage and Offloading vessels [FPSO]}
 - 2035/4486 . . {Floating storage vessels, other than vessels for hydrocarbon production and storage, e.g. for liquid cargo}
 - 2035/4493 . . {Floating structures supporting vegetation, such as trees, reeds, crops, plants, or the like, e.g. flexible structures}
 - 35/50 . Vessels or floating structures for aircraft ([aircraft carriers B63G 11/00](#); flying-boat hulls, other flotation means for aircraft [B64](#))
 - 35/52 . . Nets, slipways or the like, for recovering aircraft from the water
 - 35/53 . . Floating runways
 - 35/54 . Ferries ([propulsion of chain ferries B63H](#))
 - 35/56 . Lightships ([marking of navigational route B63B 51/00](#))
 - 35/58 . Rafts, i.e. free floating waterborne vessels, of shallow draft, with little or no freeboard, and having a platform or floor for supporting a user ([lifeboats, life-rafts or the like B63C 9/02](#))
 - 35/607 . . having a platform or floor below the level of the buoyancy means, e.g. suspended basket type
 - 35/613 . . with tubular shaped flotation members
 - 35/62 . . formed from logs or the like
 - 35/66 . Tugs ([towing or pushing equipment B63B 21/56](#))
 - 35/665 . . {Floating propeller units, i.e. a motor and propeller unit mounted in a floating box ([outboard propulsion units B63H 20/00](#))}
 - 35/68 . . for towing
 - 35/70 . . for pushing
 - 35/71 . Canoes, kayaks or the like {(collapsible, foldable, inflatable or like vessels [B63B 7/00](#))}
 - 2035/715 . . {Accessories specially adapted for kayaks, canoes, or the like, other than paddles or footrests, e.g. seats, detachable rudders, detachable propulsion means or sailing rigs}
 - 35/73 . Other vessels or like floating structures for pleasure or sport
 - 35/731 . . {Waterscooters}
 - 35/732 . . {House boats}
 - 2035/734 . . {Racing rowing boats, i.e. light, long, narrow racing boats propelled by rowing using oars or sculls; Accessories therefor, other than means for effecting propulsion}
 - 2035/735 . . {Towed structures, the towing member, e.g. tow-rope, being connected to the towed structure}
 - 2035/737 . . {for particular use, not otherwise provided for}
 - 2035/738 . . . {for hunting, or fishing}

35/74	. . . Body supporting buoyant devices with seat {; and bathing boats}	35/815	. . . {Towing devices}
35/76	. . . Ring-shaped buoyant member	35/816	. . . {Connection of the tow to the boat; using winches (winches per se B66D)}
35/78	. . . U-shaped buoyant members	35/817	. . . {Handles}
35/79	. . . Surf-boards, e.g. sailboards	2035/818	. . . {Wakeboards, i.e. monobords for users being towed behind a boat, the board comprising bindings oriented substantially perpendicular to the longitudinal axis of the board}
2035/7903	. . . {Body-boards, i.e. surfboards specially adapted for use by users in prone position; Planing members attachable to, or held by body-surfers}	35/83	. . . Water shoes; Bog shoes
35/7906	. . . {Construction or shape of the boards}	35/85	. . . Accessories not otherwise provided for, e.g. sticks for water skiing
35/7909	. . . {characterised by the arrangement of constructive parts made predominantly of plastics, e.g. layers}	2035/855	. . . {Equipment or arrangements for generating waves, particularly adapted for surfing, waterskiing, or the like}
35/7913	. . . {inflatable}		
35/7916	. . . {sectionalised}	38/00	Vessels or like floating structures not otherwise provided for (vessels characterised by load-accommodating arrangements B63B 25/00 ; fire-extinguishing vessels A62C 29/00 ; submarines, mine-layers or mine-sweepers B63G ; large containers for use in or under water B65D 88/78)
35/792	. . . {catamaran-shaped (B63B 35/7923 takes precedence)}	39/00	Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude {(for amphibious vehicles B60F 3/0038)}
35/7923	. . . {with hydrofoils (hydrofoils per se B63B 1/24)}	39/005	. . . {Equipment to decrease ship's vibrations produced externally to the ship, e.g. wave-induced vibrations (propulsion mountings for anti-vibration purposes B63H 21/30 ; vibration dampers, suppression of vibration in systems F16F)}
35/7926	. . . {Fins, keels or steering devices acting on water}	39/02	. . . to decrease vessel movements by displacement of masses
35/793	. . . {Fixations for fins which do not normally move during sailing, e.g. fixations that can be slidably set before sailing}	39/03	. . . by transferring liquids
35/7933	. . . {Emergency arrangements and equipment; Other accessories (anti-theft devices using locks E05B 73/007)}	39/04	. . . to decrease vessel movements by using gyroscopes directly
35/7936	. . . {Arrangements for the feet of the surfer}	39/06	. . . to decrease vessel movements by using foils acting on ambient water (constructional aspects of bilge keels B63B 3/44 {; foils mounted on the housing of outboard motors B63H 20/34)}
2035/794	. . . {Leashes, i.e. security lines, or tethers connecting a board to the rider, e.g. to a limb; Attachment means therefor}	39/061	. . . {by using trimflaps, i.e. flaps mounted on the rear of a boat, e.g. speed boat}
35/7943	. . . {Motordriven boards}	39/062	. . . {the foils being mounted on outriggers or the like, e.g. antidrift hydrofoils for sail boats (hydrofoils B63B 1/24 ; drop keels B63B 41/00)}
35/7946	. . . {Stowing or transporting arrangements (transporting on vehicles B60R 9/08)}	2039/063	. . . {the foils comprising flexible portions}
35/795	. . . {transformable into another vehicle, e.g. sailboat, watercycle}	2039/065	. . . {the foils being pivotal about an axis substantially parallel to the longitudinal axis of the vessel}
35/7953	. . . {Winddriven boards}	2039/066	. . . {the lift generating devices using the Magnus effect}
2035/7956	. . . {Masts for winddriven boards; Equipment therefor, other than mastfoot arrangements}	2039/067	. . . {effecting motion dampening by means of fixed or movable resistance bodies, e.g. by bilge keels}
35/7959	. . . {Mast foot arrangements}	2039/068	. . . {the foils having a variable cross section, e.g. a variable camber}
2035/7963	. . . {comprising shock absorbing elements}	39/08	. . . to decrease vessel movements by using auxiliary jets or propellers (for steering or dynamic anchoring B63H 25/00)
35/7966	. . . {Wishbone}	39/10	. . . to decrease vessel movements by damping the waves, e.g. by pouring oil on water
35/7969	. . . {Connection to the mast}	2039/105	. . . {by absorption of wave energy, e.g. by structured, wave energy absorbing hull surfaces}
35/7973	. . . {Sail arrangements}	39/12	. . . for indicating draught or load
35/7976	. . . {Sails pivotally mounted at a mast-tip; Kite-sails (kites per se B64C 31/06)}	39/14	. . . for indicating inclination or duration of roll
35/7979	. . . {Control means for kite-sails; Harnesses for connecting kite-sails to a user, e.g. of quick release type}		
35/7983	. . . {Sails with detachable sections, e.g. to change the sail area}		
2035/7986	. . . {Clew trimmers, i.e. mechanisms or arrangements for trimming or positioning the clew of the sail, or for tensioning the outhaul}		
35/7989	. . . {Devices to tension the luff of the sail}		
35/7993	. . . {Harnesses or handgrips}		
35/7996	. . . {with elastic connection to the wishbone}		
35/81	. . . Waterskis; Watersledges		
35/811	. . . {with means for additional lift by provision of hollow bodies}		
35/812	. . . {Bindings}		
2035/813	. . . {Fins, keels, or the like water guiding means; Arrangements thereof on waterskis}		

41/00	Drop keels, e.g. centre boards or side boards {; Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels (keels integral with hull B63B 3/38; foils or keels on surf-boards B63B 35/7906; stabilising foils B63B 39/06)}	45/02	the devices being intended to illuminate the way ahead or other areas of environments
2041/003	. {Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels}	45/04	. the devices being intended to indicate the vessel or parts thereof
2041/006	. . {Telescopically collapsible keels}	45/06	. the devices being intended to illuminate vessels' decks or interior
43/00	Improving safety of vessels, e.g. damage control, not otherwise provided for (fire-fighting in ships A62C 3/10)	45/08	. the devices being acoustic
2043/003	. {Arrangements of emergency exits, e.g. for escape from engine rooms}	49/00	Arrangements of nautical instruments or navigational aids (nautical measuring instruments G01C; radio navigation, analogous arrangements using other waves G01S)
2043/006	. {Methods or installations specially adapted for detecting ingress of ambient water, e.g. leak detectors}	51/00	Marking of navigation route
43/02	. reducing risk of capsizing or sinking (by means of watertight doors in bulkheads B63B 43/24)	51/02	. with anchored lightships; by use of lighthouses
43/04	. . by improving stability	51/04	. with free-floating flares
2043/042	. . . {using outboard booms supporting ballast, other than solid ballast or persons, e.g. carrying water-filled bags}	57/00	Tank {or cargo hold} cleaning specially adapted for vessels (tank cleaning in general B08B 9/08)
43/045	. . . {by decreasing the free surface effect of water entered in enclosed decks}	2057/005	. {of ballast tanks, e.g. from deposits, biological organisms; Ship-borne installations therefor}
2043/047	. . . {by means of hull shapes comprising a wide hull portion near the design water line, and a slender, buoyancy providing, main hull portion extending towards the bottom}	57/02	. by washing
43/06	. . . using ballast tanks (conduits for emptying or ballasting B63B 13/00)	57/04	. by ventilating
43/08	. . . by transfer of solid ballast	59/00	Hull protection peculiar to vessels; Cleaning devices peculiar to vessels and integral therewith (cleaning of vehicles in general B60S; other cleaning in general B08B; inhibiting corrosion of metals by anodic or cathodic protection C23F 13/00)
43/085	. . . . {the stabilising effect being provided by the weight of a person placed on an outrigger seat swingable around a vertical axis}	59/02	. Fenders integral with waterborne vessels or specially adapted therefor, {e.g. fenders forming part of the hull or incorporated in the hull}; Rubbing-strakes (fenders on coasts, in harbours or on other fixed marine structures E02B 3/26)
43/10	. . by improving buoyancy {(amphibious cycles B60F 3/0038)}	2059/025	. . {pneumatic, e.g. inflatable}
43/12	. . . using inboard air containers {or inboard floating members}	59/04	. Preventing hull fouling (anti-fouling paints C09D 5/16)
2043/123	. . . . {using floaters mounted to the tip of a mast, e.g. inflatable}	59/045	. . {by wrapping the submerged hull or part of the hull with an impermeable sheet (stopping temporarily leaks in hulls with impermeable sheets B63B 43/16)}
2043/126	. . . . {pneumatic, e.g. inflatable on demand}	59/06	. Cleaning devices for hulls
43/14	. . . using outboard floating members	2059/065	. . {mounted on land-borne vehicles, e.g. travelling on the bottom of a dry-dock}
2043/145	. . . . {pneumatic, e.g. inflatable on demand}	59/08	. . of underwater surfaces while afloat (B63B 59/10 takes precedence)
43/16	. . . Temporary equipment for stopping leaks, e.g. collision mats	2059/082	. . . {the devices being supported on arms or rods}
43/18	. preventing collision {or grounding}; reducing collision damage {(reducing pollution by collision B63B 25/082)}	2059/085	. . . {the devices being adapted for operation by divers}
2043/185	. . {using shock absorbing telescoping buffers}	2059/087	. . . {the devices being adapted for being pulled across, or along the underwater surface to be cleaned, e.g. by ropes}
43/20	. . Feelers	59/10	. . using trolleys or the like driven along the surface
43/24	. Arrangements of watertight doors in bulkheads	69/00	Equipment for shipping not otherwise provided for
43/26	. . of sliding type	2201/00	Signalling devices
43/28	. . . with mechanical drive	2201/02	. Audible
43/30	. . . with fluid drive	2201/04	. Illuminating
43/32	. . of non-sliding type	2201/06	. . by combustion of fluid
45/00	Arrangements or adaptations of signalling or lighting devices (arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; life- buoys, -belts, -jackets, -suits or the like, characterised by signalling means B63C 9/20; lighting devices or systems therefor F21L, F21S)	2201/08	. . Electric light
2045/005	. {comprising particular electric circuits}	2201/10	. Smoke producing
		2201/12	. Reflecting means
		2201/14	. Balloon
		2201/16	. Radio

2201/18	• Sonar	2231/00	Material used for some parts or elements, or for particular purposes
2201/20	• Antenna or mast	2231/02	• Metallic materials
2201/22	• Spread-open chemicals or other products	2231/04	• • Irons, steels or ferrous alloys
2201/24	• by means of bubbles	2231/06	• • • Stainless steels
2201/26	• signalling anomalies, e.g. rupture of connection	2231/10	• • Aluminium or aluminium alloys
2203/00	Communication means	2231/12	• • Copper or copper alloys
2203/02	• telephone	2231/14	• • • Bronze, e.g. nickel-aluminium bronze
2205/00	Tether	2231/16	• • • Brass
2205/02	• Having payout means	2231/18	• • Titanium or titanium alloys
2205/04	• • Having means to control payout	2231/20	• • Magnesium or magnesium alloys
2205/06	• • Reel for tether	2231/28	• • Shape-memory alloys
2205/08	• with means for recovering the sunken object	2231/30	• Magnetic materials
2207/00	Buoyancy or ballast means	2231/32	• Vegetable materials or material comprising predominately vegetable material
2207/02	• Variable ballast or buoyancy	2231/34	• • Wood or wood products
2207/04	• Pressure equalising or adjusting	2231/40	• Synthetic materials
2209/00	Energy supply or activating means	2231/42	• • Elastomeric materials
2209/02	• water activated switches	2231/44	• • • Rubber
2209/04	• water activated batteries	2231/46	• • • • Natural rubber or caoutchouc
2209/06	• fluid produced by reaction with water	2231/48	• • • • Synthetic rubber, e.g. silicone rubber, Neoprene, polyurethane
2209/08	• impact with water-surface or -bottom	2231/50	• • Foamed synthetic materials
2209/10	• pyrotechnic means	2231/52	• • Fibre reinforced plastics materials
2209/12	• with time-delay	2231/60	• Concretes
2209/14	• energy generated by movement of the water	2231/62	• • Lightweight concretes
2209/16	• nuclear energy	2231/64	• • Reinforced or armoured concretes
2209/18	• solar energy	2231/66	• • • Fibre reinforced concretes, e.g. synthetic fibre reinforced concretes
2209/20	• wind energy	2231/68	• • Prestressed concretes
2211/00	Applications	2231/70	• Glass
2211/02	• Oceanography	2231/72	• • Hollow glass microspheres
2211/04	• Diving	2231/74	• Bituminous materials or the like
2211/06	• Operation in ice-infested waters	2231/76	• Ice
2213/00	Navigational aids and use thereof, not otherwise provided for in this class	2241/00	Design characteristics
2213/02	• using satellite radio beacon positioning systems, e.g. the Global Positioning System GPS	2241/02	• Design characterised by particular shapes
2221/00	Methods and means for joining members or elements	2241/04	• • by particular cross sections
2221/02	• by welding	2241/06	• • • Circular cross sections
2221/04	• by soldering	2241/08	• • • Polygonal cross sections
2221/06	• by riveting	2241/10	• • by particular three dimensional shapes
2221/08	• by means of threaded members, e.g. screws, threaded bolts or nuts	2241/12	• • • annular or toroidal
2221/10	• using adhesives	2241/14	• • • spherical
2221/12	• by means of hook and loop fasteners	2241/16	• • • polyhedral
2221/14	• by means of zippers or the like	2241/20	• Designs or arrangements for particular purposes not otherwise provided for in this class
2221/16	• by means of ties, ribbons or the like	2241/22	• • for providing redundancy to equipment or functionality of a vessel, e.g. for steering
2221/18	• by sewing, stitching, stapling or the like methods	2241/24	• • for facilitating transport, e.g. hull shape with limited dimensions
2221/20	• Joining substantially rigid elements together by means that allow one or more degrees of freedom, e.g. hinges, articulations, pivots, universal joints, telescoping joints, elastic expansion joints, not otherwise provided for in this class	2241/26	• • • for transport on roads, e.g. hull shape with maximum dimensions for public roads
2221/22	• • by means that allow one or more degrees of angular freedom, e.g. hinges, articulations, pivots, universal joints, not otherwise provided for in this class	2241/28	• • • for airborne transport
2221/24	• • by means that allow one or more degrees of translational freedom, e.g. telescopic joints, not otherwise provided for in this class	2701/00	Building of the ship's hull
		2701/02	• Steel construction
		2701/04	• Reinforced concrete construction
		2701/06	• Wood construction; Composite construction
		2701/08	• Electric and fusion welding for ships (welding in general B23K)
		2701/10	• Keelsons, floors, double bottoms, tanks, coal bunkers, tunnels, engine and boiler rooms

- 2701/12 . Frames, web frames, deck beams, longitudinal girders, coamings, deck pillars
- 2701/14 . Deck plating, wooden decks for steel ships
- 2701/16 . Shell plating and bulwarks; Fenders; Gunwales; Bilge keels and other elements fixed to the shell
- 2701/18 . Longitudinal and transverse bulkheads made of steel or wood
- 2701/20 . Stems and keels; Stern frames; Bossings and struts; Propeller guards
- 2701/22 . Lining and panelling in wood or metal; Movable partition walls within accommodation spaces; Insulating walls; Stairs; Windshields on decks ([internal partitions for buildings E04B 2/00](#))
- 2702/00 Submarines**
- 2702/02 . Equipment for lifting sunken submarines ([Equipment for salvaging sunken vessels or other objects B63C 7/00](#))
- 2702/04 . Arrangements of motors and transmissions in submarines; Propulsion
- 2702/06 . Arrangements for the transportation, drydocking, and testing of submarines ([drydocking B63C 1/00](#))
- 2702/08 . Arrangements for anchoring of submarines
- 2702/10 . Miscellaneous arrangement for submarines
- 2702/12 . Submarines of special construction or fitted with special devices or apparatus; Merchant submarines
- 2702/14 . Arrangements for detecting and localising submarines ([Acoustic detection G01S](#), [electromagnetic detection G01N](#))
- 2704/00 Port-holes, windows, doors and other openings in the superstructures**
- 2705/00 Closets, latrines, swimming pools and washing facilities for ships; Overboard discharges**
- 2707/00 Doors and closing means**
- 2708/00 Winches; Capstans**
- 2708/02 . Winches and capstans driven by electric or electro-hydraulic means
- 2709/00 Tables, chairs and other furniture peculiar to vessels**
- 2710/00 Miscellaneous equipment for ships, e.g. collision mats, rat guards**
- 2711/00 Equipment for watching and measuring the oscillations, the resistance and the movements of ships; Model towing tanks**
- 2712/00 Equipment for handling the boats by means of turning davits, i.e. a set formed by the davit, davit foundation, davit drive, boat support, boat guides, boat pulley blocks and winches**
- 2712/02 . Equipment for handling the boats by means of swinging davits, i.e. a set formed by the davit, davit foundation, davit drive, boat support, boat guides, boat pulley blocks and winches
- 2713/00 Stowing of the boats, i.e. arrangement, chocks, lashing down and transport of the boats on deck**
- 2714/00 Construction of turning davits, davit foundations and davit drives**
- 2714/02 . Construction of swinging davits and other davits and of davit foundation and drives
- 2715/00 Hydraulic and pneumatic steering gear**
- 2716/00 Steam-powered steering gear**
- 2717/00 Hand-operated steering gears; Combined hand and steam-powered steering gears**
- 2718/00 Components of the steering gears, e.g. steering wheels, telemotors, driving chains, shock dampers, quadrants, arrangements to block the rudder, brakes, rudder stops**
- 2719/00 Arrangements for slowing-down of ships by means of side flaps and for creating a lateral resistance for manoeuvring**
- 2721/00 Automatic steering apparatus, non-electric**
- 2721/02 . Auxiliary steering gear and other steering arrangements
- 2722/00 Towing in general**
- 2723/00 Miscellaneous equipment for towing**
- 2724/00 Navigation signals, e.g. masthead and side lights, marking of seaways, arrangements of compasses**
- 2725/00 Engine room signals and arrangements for controlling the main engines from the navigation bridge**
- 2726/00 Miscellaneous signalling devices and draft indicators**
- 2727/00 Signalling devices using acoustic or mechanical means**
- 2727/02 . Arrangements for the detection of icebergs, reefs, derelicts, or the like
- 2728/00 Lifeboats, liferafts, lifesaving floats, etc.**
- 2729/00 Coastal lifesaving**
- 2730/00 Diving suits**
- 2730/02 . Resilient suits
- 2731/00 Arrangements for avoiding capsizing and sinking**
- 2732/00 Arrangements for avoiding or reducing collision damage**
- 2733/00 Arrangements for reducing the risk of running aground; Depth sounders**
- 2734/00 Loading and unloading ships by ship-mounted means**
- 2735/00 Miscellaneous shipbuilding-related arrangements and constructions, e.g. pontoons**
- 2736/00 Slipways, shipyard installations and apparatus for launching or hauling-out ships**
- 2737/00 Dry and floating docks; Cleaning devices for hulls; Drydocking of hull parts; Equipment for dry and floating docks**
- 2738/00 Re-floating of ships and sunken objects**
- 2738/02 . Salvaging of ships by means of floats
- 2738/04 . Salvaging of ships using cofferdams
- 2738/06 . Salvaging of ships using diving bells
- 2738/08 . Salvaging of ships by other means, e.g. using balloons or frozen blocks
- 2738/10 . Floating docks for lifting ships

- 2738/12 . Attaching floats and chains to the hull by mechanical means; Lifting chains
- 2739/00 Boats or canoes in general; Construction and outfitting**
- 2741/00 Manual propulsion; Paddles**
- 2742/00 Anti-torpedo nets and shields for ships; Anti-submarine nets and devices for the protection of harbours and means for the destruction thereof**
- 2742/02 . Arrangements on ships for reducing danger due to torpedo or sea mine explosions
- 2743/00 Paddle wheels for ships in general**
- 2744/00 Stern paddle wheels**
- 2745/00 Propellers for ships in general ([construction of air propellers B64C](#))**
- 2745/02 . Contra-propellers and other water guiding installations in front of or behind the rotating propeller ([rudders with water guiding surfaces B63H 25/00](#))
- 2745/04 . Propulsive devices, e.g. rotating cylinders, paddle wheels; Rudders or stabilising surfaces using Magnus effect
- 2746/00 Propellers with air exhaust, e.g. hollow propellers for ships**
- 2747/00 Arrangements of propellers and other propulsive devices on ships**
- 2747/02 . Propellers driven by outboard motors placed astern or on the sides of the ship
- 2748/00 Propeller hubs and blade connections**
- 2749/00 Propeller shafts and paddle-wheel shafts; Shaft liners**
- 2750/00 Propeller shaft bearings, thrust bearings**
- 2751/00 Propulsion of ships using the reaction effect of a water jet**
- 2752/00 Propulsion of ships using the reaction effect of steam jets or gas jets**
- 2753/00 Propulsion of ships using the reaction effect of gas explosions**
- 2754/00 Propulsive flaps**
- 2755/00 Electric drives for the propulsive devices**
- 2756/00 Steam reciprocating engine drives for the propulsive devices**
- 2757/00 Steam turbine drives for the propulsive devices**
- 2758/00 Internal combustion engine drives for the propulsive devices**
- 2759/00 Other means for driving marine propulsion devices; Arrangements for synchronising two or more engines**
- 2760/00 Marine drive governors that are influenced by the movements of the ship**
- 2770/00 Apparatus or methods specially adapted for use on marine vessels, for handling power plant or unit liquids, e.g. lubricants, coolants, fuels or the like**