

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 (arrangements of vessel ventilation, heating, cooling, or air-conditioning [B63J 2/00](#); floating substructures as supports of dredgers or soil-shifting machines [E02F 9/06](#))

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 (hulls peculiar to submarines B63B 3/13; keels B63B 3/38)	1/121	. . . . {comprising two hulls (B63B 1/107 takes precedence)}
2001/005	. {Deflectors for spray, e.g. for guiding spray generated at the bow of a planing vessel underneath the hull}	2001/123	. . . . {interconnected by a plurality of beams, or the like members only}
1/02	. deriving lift mainly from water displacement (B63B 1/16 takes precedence)	1/125	. . . . {comprising more than two hulls (B63B 1/107 takes precedence)}
1/04	. . with single hull	2001/126	. . . . {comprising more than three hulls}
1/041	. . . {with disk-shaped hull}	2001/128	. . . . {comprising underwater connectors between the hulls}
1/042	. . . {the underpart of which being partly provided with channels or the like, e.g. catamaran shaped}	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)}
2001/044	. . . {with a small waterline area compared to total displacement, e.g. of semi-submersible type}	2001/145	. . . . {having means for actively varying hull shape or configuration}
2001/045	. . . {with means for actively varying hull shape or configuration, e.g. for varying hydrodynamic characteristics}	1/16	. deriving additional lift from hydrodynamic forces
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)}	1/18	. . of hydroplane type
1/048	. . . {with hull extending principally vertically}	2001/183	. . . {having non-floating planing surfaces, e.g. attached skis or plate-shaped bodies}
1/06	. . . Shape of fore part	2001/186	. . . {Sponsons; Arrangements thereof}
1/063	. . . . {Bulbous bows}	1/20	. . . having more than one planing surface (B63B 1/22 takes precedence)
2001/066	. . . . {Substantially vertical stems}	2001/201	. . . . {divided by longitudinal chines}
1/08	. . . Shape of aft part	2001/202	. . . . {divided by transverse steps}
1/10	. . with multiple hulls	2001/203	. . . . {arranged in semi-catamaran configuration}
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}	2001/204	. . . . {arranged on multiple hulls}
1/105	. . . {comprising a cockpit surrounded and pivotally supported by at least three floats}	2001/205	. . . . {the hulls being interconnected rigidly}
1/107	. . . {Semi-submersibles; Small waterline area multiple hull vessels and the like, e.g. SWATH }	2001/206	. . . . . {comprising two hulls, e.g. catamarans}
1/12	. . . the hulls being interconnected rigidly {(B63B 1/107 takes precedence)}	2001/207	. . . . . {comprising more than two hulls}
		2001/208	. . . . . {comprising three hulls, e.g. trimarans}
		2001/209	. . . . . {the hulls being interconnected resiliently, or having means for actively varying hull shape or configuration}
		1/22	. . . with adjustable planing surfaces
		1/24	. . of hydrofoil type (hydrofoils for water sports boards B63B 32/60 ; hydrofoils for other water sports body supporting devices B63B 34/40)

1/242	. . . {Mounting, suspension of the foils (B63B 1/30 takes precedence)}	2003/145	. . {Frameworks, i.e. load bearing assemblies of trusses and girders interconnected at nodal points}
1/244	. . . {Safety systems, e.g. when striking an object}	2003/147	. . {Moon-pools, e.g. for offshore drilling vessels}
1/246	. . . {Arrangements of propulsion elements}	3/16	. . Shells (ports or closures therefor B63B 19/00)
1/248	. . . {Shape, hydrodynamic features, construction of the foil}	3/18	. . . characterised by being formed predominantly of parts that may be developed into plane surfaces
1/26	. . . having more than one hydrofoil (B63B 1/28 takes precedence)	3/185	. . . . {comprising only flat panels}
1/28	. . . with movable hydrofoils	3/20	. . . of double type
2001/281	. . . . {movable about an axis substantially parallel to the flow direction}	3/22	. . . with corrugations
1/283	. . . . {movable around a vertical axis, e.g. for steering}	3/24	. . . Means for diminishing external ridges of protrusions
1/285	. . . . {changing the angle of attack or the lift of the foil}	3/26	. . Frames
1/286	. . . . . {using flaps}	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}
1/288	. . . . . {using gas exhaust through the foil}	3/28	. . . of transverse type; Stringers
1/30	. . . . retracting or folding {(B63B 1/244 takes precedence)}	3/30	. . . . Bilge knees; Beam knees
1/32	. Other means for varying the inherent hydrodynamic characteristics of hulls	3/32	. . . Web frames; Web beams
1/322	. . {using aerodynamic elements, e.g. aerofoils producing a lifting force (flying boats B64C 35/00)}	3/34	. . . of longitudinal type; Bulkhead connections
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}	3/36	. . . Combined frame systems
2001/327	. . {using magneto-hydrodynamic forces}	3/38	. . Keels (movable keels B63B 41/00)
1/34	. . by reducing surface friction	2003/382	. . . {adapted for housing energy accumulators, e.g. batteries}
2001/345	. . . {by ejecting friction reducing solids or liquids, e.g. polymers}	2003/385	. . . {with means for controlling heeling or rolling motions, or lift, e.g. flaps, by changing geometry, or by ballast displacement}
1/36	. . . using mechanical means	2003/387	. . . {adapted for housing propulsion plant elements}
1/38	. . . using air bubbles or air layers {gas filled volumes (waterborne vessels travelling on air cushions B60V 3/06)}	3/40	. . Stern posts; Stern frames
2001/382	. . . . {by making use of supercavitation, e.g. for underwater vehicles}	3/42	. . Shaft brackets
2001/385	. . . . {using exhaust gas}	2003/425	. . . {having features not related to structural construction, e.g. hydrodynamic properties or bearings}
2001/387	. . . . {using means for producing a film of air or air bubbles over at least a significant portion of the hull surface}	3/44	. . Bilge keels (stabilising aspect B63B 39/06)
1/40	. . by diminishing wave resistance	3/46	. . Stems
3/00	Hulls characterised by their structure or component parts (non-metallic hulls B63B 5/00; designing, building, maintaining or repairing methods B63B 71/00 - B63B 83/00)	3/48	. . Decks (planking B63B 5/06)
3/02	. Hulls assembled from prefabricated sub-units	2003/485	. . . {movably connected to hull or superstructure}
3/04	. . with permanently-connected sub-units	3/50	. . . of vaulted type
3/06	. . . the sub-units being substantially identical	3/52	. . . Pillars; Deck girders
3/08	. . with detachably-connected sub-units	3/54	. . . Hatch openings
2003/085	. . . {Multiple hull vessels, e.g. catamarans, assembled from detachably-connected sub-units}	3/56	. . Bulkheads; Bulkhead reinforcements (arrangements of watertight doors B63B 43/24)
3/09	. Hulls constructed of non-magnetic metal	3/58	. . . with flat plating
3/10	. Armoured hulls	3/60	. . . with curved or corrugated plating
3/12	. Frameless hulls	3/62	. . Double bottoms; Tank tops
3/13	. Hulls built to withstand hydrostatic pressure when fully submerged, e.g. submarine hulls	3/64	. . . Keelsons
3/14	. Hull parts (hull armour B63B 3/10)	3/66	. . Gratings
3/142	. . {Connections between the shell and deck}	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)}
		5/08	. . . with single-layer planking
		5/10	. . . with multiple-layer planking

5/12	• made predominantly of wood with metal reinforcement, i.e. composite construction	2015/0008	• {Bowsprits}
5/14	• made predominantly of concrete, e.g. reinforced	2015/0016	• {Masts characterized by mast configuration or construction}
5/16	• . . monolithic	2015/0025	• . . {Bipodded masts, e.g. A-type masts}
5/18	• . . built-up from elements	2015/0033	• . . {Multipodded masts, e.g. tripod-type}
5/20	• . . . in combination with elements of other materials	2015/0041	• . . {Telescoping masts}
5/22	• . . with reinforcing members external to shell	2015/005	• . . {with means for varying mast position or orientation with respect to the hull}
5/24	• made predominantly of plastics {(surf boards B63B 32/57)}	2015/0058	• . . . {comprising active mast inclination means}
2005/242	• . . {made of a composite of plastics and other structural materials, e.g. wood or metal}	2015/0066	• . . . {Inclinable masts with passive righting means, e.g. counterbalancing means}
2005/245	• . . . {made of a composite of plastics and metal}	2015/0075	• . . . {with mast foot adapted for being moved, e.g. athwartship}
2005/247	• . . . {made of a composite of plastics and wood}	15/0083	• {Masts for sailing ships or boats}
7/00	Collapsible, foldable, inflatable or like vessels (collapsible, foldable or inflatable water sports boards B63B 32/53 ; collapsible, foldable or inflatable canoes, kayaks or the like B63B 34/23 ; foldable pontoons B63B 35/36)	2015/0091	• . . {comprising means for silencing rope noise}
2007/003	• {with foldable members}	15/02	• Staying of masts or of other superstructures
2007/006	• {comprising nestable elements}	17/00	Vessels parts, details, or accessories, not otherwise provided for {(vehicle fittings for preventing or indicating unauthorized 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)}
7/02	• comprising only rigid parts	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}
7/04	• . . sectionalised (sectionalised water sports boards B63B 32/53 ; sectionalised canoes, kayaks or the like B63B 34/23)	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)}
7/06	• having parts of non-rigid material	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)}
2007/065	• . . {comprising flexible pockets for receiving removable floaters}	17/0036	• . . {Arrangements for minimizing pollution by accidents (associated with cargo tanks B63B 25/082)}
7/08	• . . Inflatable (inflatable water sports boards B63B 32/51 ; inflatable canoes, kayaks or the like being inflatable or having inflatable parts B63B 34/22)	2017/0045	• {Caps, hoods, or the like devices for protective purposes, not otherwise provided for}
7/082	• . . . {having parts of rigid material}	2017/0054	• {Rests or supports for movable ship-borne equipment}
7/085	• . . . {Accessories or mountings specially adapted therefor, e.g. seats, sailing kits, motor mountings}	2017/0063	• . . {Boom rests, i.e. props for main sail booms, derricks, or the like}
7/087	• {Motor mountings, e.g. transom panels for outboard motors}	2017/0072	• {Seaway compensators}
11/00	Interior subdivision of hulls (bulkhead space construction B63B 3/56)	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)}
11/02	• Arrangement of bulkheads, e.g. defining cargo spaces	2017/009	• {Wave breakers, breakwaters, splashboards, or the like}
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)	17/02	• Awnings {, including rigid weather protection structures, e.g. sunroofs; Tarpaulins; Accessories for awnings or tarpaulins}
11/06	• Propeller-shaft tunnels	17/023	• . . {Hatchway tents, e.g. for weather protection of cargo during loading or unloading}
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)		
2013/005	• {Sea chests}		
13/02	• Ports for passing water through vessels' sides {(jet propulsors with clogging prevention means B63H 11/01)}		
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 })		

- 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}
- 21/06 . . Bollards
- 21/08 . . Clamping devices ([in general \[F16B\]\(#\)](#); {[means for fastening cables or ropes to one another or to other objects in general \[F16G 11/00\]\(#\)](#)})
- 21/10 . . Fairleads
- 21/12 . . Rat guards
- 21/14 . . Hawse-holes; Hawse-pipes; Hawse-hole closures
- 21/16 . using winches ([winches per se \[B66D\]\(#\)](#))
- 21/18 . Stoppers for anchor chains {([anchor capstans \[B66D 1/72\]\(#\)](#))}
- 21/20 . Adaptations of chains, ropes, hawsers, or the like, or of parts thereof
- 2021/203 . . {Mooring cables or ropes, hawsers, or the like; Adaptations thereof}
- 2021/206 . . {Weights attached to mooring lines or chains, or the like; Arrangements thereof}
- 21/22 . Handling or lashing of anchors
- 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}
- 2021/225 . . {Marker buoys for indicating position of an anchor, or for providing a line connection between the anchor and the water surface}
- 21/227 . . {Stowing the anchor inside the vessel by hauling-in through an aperture in the side walls, stern or bottom}
- 21/24 . Anchors

- 21/243 . . {foldable or capable of being disassembled (Anchors with two or more foldable flukes [B63B 21/36](#))}
- 2021/246 . . {comprising elements yielding at a predetermined load, e.g. shear bolts}
- 21/26 . . securing to bed
- 2021/262 . . . {by drag embedment}
- 2021/265 . . . {by gravity embedment, e.g. by dropping a pile-type anchor from a certain height}
- 2021/267 . . . {by penetration of anchor into the sea bed using water jets, e.g. by ground or sand fluidisation}
- 21/27 . . . by suction
- 21/28 . . . driven in by explosive charge
- 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}
- 2021/504 . . . {comprising suppressors for vortex induced vibrations}
- 2021/505 . . {Methods for installation or mooring of floating offshore platforms on site}
- 21/507 . . {with mooring turrets}
- 21/508 . . . {connected to submerged buoy (mooring buoys per se [B63B 22/02](#))}
- 21/54 . Boat-hooks or the like {, e.g. hooks detachably mounted to a pole}
- 21/56 . Towing or pushing equipment (tugs [B63B 35/66](#); towing arrangements for water sports use [B63B 34/60](#))
- 2021/563 . . {Pushing equipment}
- 2021/566 . . {comprising running ropes or chains, e.g. endless, driven by ground-borne equipment}
- 21/58 . . Adaptations of hooks for towing; Towing-hook mountings (hooks in general [F16B](#))
- 21/60 . . . Quick releases
- 21/62 . . characterised by moving of more than one vessel (rigid interconnections between pontoons [B63B 35/38](#))
- 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)
- 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](#))
- 21/663 . . . {Fairings}
- 2021/666 . . . {for intermittent towing}
- 22/00 Buoy** ({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](#)})
- 22/003 . {adapted for being launched from an aircraft or water vehicle; e.g. with brakes deployed in the water}
- 2022/006 . {specially adapted for measuring or watch purposes}
- 22/02 . specially adapted for mooring a vessel
- 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](#))}
- 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](#))}
- 22/025 . . . {and comprising a restoring force in the mooring connection provided by means of weight, float or spring devices}
- 22/026 . . . {and with means to rotate the vessel around the anchored buoy (turrets [B63B 21/507](#))}
- 2022/028 . . {submerged, e.g. fitting into ship-borne counterpart with or without rotatable turret, or being releasably connected to moored vessel}
- 22/04 . {Fixations or other} anchoring arrangements
- 22/06 . . with means to cause the buoy to surface in response to a transmitted signal {(B63B 22/023 takes precedence)}
- 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
- 22/10 . . . Water soluble or water weakened means, i.e. buoy released by buoy-to-object securing means being destroyed on contact with water
- 22/12 . . . the surfacing of the buoy being assisted by a gas released or generated on submergence of the buoy
- 22/14 . . . Buoy-to-object securing means responsive to hydrostatic pressure
- 22/16 . specially adapted for marking a navigational route (signalling or lighting devices [B63B 45/00](#))
- 22/163 . . {comprising a bell or other audible signal}
- 22/166 . . {comprising a light}
- 22/18 . having means to control attitude or position, e.g. reaction surfaces or tether
- 22/20 . . Ballast means
- 22/22 . Inflatable buoys with gas generating means ([B63B 22/12](#) takes precedence)
- 22/24 . container type, i.e. having provision for the storage of material

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)	25/004	. . {for containers (B63B 25/28 takes precedence)}
22/28	. . submerged when not in use (B63B 22/023 takes precedence)}	25/006	. . {for floating containers, barges or other floating cargo (for transporting marine vessels B63B 35/40)}
23/00	Equipment for handling lifeboats or the like	25/008	. . {for wheeled cargo (B63B 25/20 takes precedence)}
23/02	. Davits, i.e. devices having arms for lowering boats by cables or the like	25/02	. for bulk goods
23/04	. . with arms pivoting on substantially horizontal axes, e.g. gravity type	2025/022	. . {comprising flexible receptacles for bulk cargo, e.g. bladders for liquid cargo inserted in tanks}
23/06	. . . with actual pivots	2025/025	. . {Vessels adapted for particular combinations of bulk cargo}
23/08	. . . . the arms being articulated	2025/027	. . . {Ore-bulk-oil carriers}
23/10	. . . . with positive drive of the arms	25/04	. . solid
23/12	. . . with simulated pivots	25/06	. . . for cereals
23/14	. . . . using linkages	25/08	. . fluid {(constructional features of bunkers B63B 11/04 ; tanks for fuel or the like not forming bunkers B63B 17/0027)}
23/16	. . . . using guide tracks	25/082	. . . {Arrangements for minimizing pollution by accidents (associated with tanks for fuel or the like not forming bunkers B63B 17/0036)}
23/18	. . with arms pivoting on substantially vertical axes	2025/085	. . . {comprising separation membranes}
23/20	. . . Davits with single arms (cranes in general B66C)	2025/087	. . . {comprising self-contained tanks installed in the ship structure as separate units}
23/22	. . . . Slings or the like therefor	25/10	. . . open to ambient air
23/24	. . . Slewing equipment therefor	25/12	. . . closed
23/26	. . with rectilinear translation of boat before lowering	25/14	. . . . pressurised
23/28	. Devices for projecting or releasing boats for free fall	25/16	. . . . heat-insulated (insulating panelling B63B 3/68 ; heating or cooling B63J)
23/30	. Devices for guiding boats to water surface	25/18	. Detachable decks
23/32	. . Rigid guides, e.g. having arms pivoted near waterline	25/20	. . for motor vehicles or the like
23/34	. . Guiding means for lowering by cables, e.g. for listing ships	25/22	. for palletised articles
23/36	. . . Skid fenders	25/24	. Means for preventing unwanted cargo movement, e.g. dunnage
23/38	. Transport of boats to davits or the like	2025/245	. . {of wheeled cargo, e.g. vehicle retainers}
23/40	. Use of lowering or hoisting gear	25/26	. for frozen goods
23/42	. . with braking equipment	25/28	. for deck loads
23/44	. . . on the ship	2025/285	. . {Means for securing deck containers against unwanted movements}
23/46	. . . in the boat		
23/48	. . using winches for boat handling (winches per se B66D)	27/00	Arrangement of ship-based loading or unloading equipment for cargo or passengers (self-discharging barges or lighters B63B 35/30; floating cranes B66C 23/52)
23/50	. . . with tensioning gear	27/04	. of derricks {, i.e. employing ships' masts}
23/52	. . . with control of winches from boat	27/06	. . {with slewing force exerted at pivoted end}
23/54	. . with trimming equipment	27/08	. of winches
23/56	. . . controlled from boat	27/10	. of cranes
23/58	. . with tackle engaging or release gear	27/12	. . of gantry type
23/60	. . Additional connections between boat and davits	27/14	. of ramps, gangways or outboard ladders {; Pilot lifts}
23/62	. Fastening or storing of boats on deck	2027/141	. . {telescopically extendable}
23/64	. . Lashings; Covers	27/143	. . {Ramps}
23/66	. . Blocks; Chocks	2027/145	. . . {Inflatable ramps}
23/68	. . . for stacking boats	27/146	. . {Pilot ladders or similar outboard ladders, e.g. bathing ladders; Pilot lifts}
23/70	. Condition-responsive handling equipment, e.g. automatic release of boat from lowering tackle upon contact with water	2027/148	. . . {Pilot lifts}
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)	27/16	. of lifts or hoists {(pilot lifts B63B 27/146)}
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)}	2027/165	. . {Deployment or recovery of underwater vehicles using lifts or hoists}
		27/18	. of cableways, e.g. with breeches-buoys
		27/19	. {Other loading or unloading equipment involving an intermittent action, not provided in groups B63B 27/04 - B63B 27/18 }

27/22	<ul style="list-style-type: none"> of conveyers, e.g. of endless-belt or screw-type {arrangements of devices with throwing action B63B 27/26; arrangements of chutes B63B 27/28} 		stand-up paddle [SUP] boards or water skis; accessories for such structures.
27/24	<ul style="list-style-type: none"> of pipe-lines 	32/10	<ul style="list-style-type: none"> Motor-propelled water sports boards (power-driven personal watercraft B63B 34/10)
27/25	<ul style="list-style-type: none"> for fluidised bulk material 	32/20	<ul style="list-style-type: none"> Boards specially adapted for use in a prone position, e.g. wild-water sledges (towed water sledges B63B 34/54)
27/26	<ul style="list-style-type: none"> of devices with throwing action 		
27/28	<ul style="list-style-type: none"> of chutes 	32/22	<ul style="list-style-type: none"> Bodyboards for surfing; Accessories specially adapted therefor
27/29	<ul style="list-style-type: none"> {Other loading or unloading equipment involving a continuous action, not provided in groups B63B 27/22 - B63B 27/28} 	32/30	<ul style="list-style-type: none"> Water skis fastened to the user's feet; Accessories specially adapted therefor
27/30	<ul style="list-style-type: none"> {Arrangement of ship-based loading or unloading equipment} for transfer at sea between ships or between ships and off-shore structures 	32/35	<ul style="list-style-type: none"> {Bindings}
27/32	<ul style="list-style-type: none"> using cableways 	32/40	<ul style="list-style-type: none"> Twintip boards; Wakeboards; Surfboards; Windsurfing boards; Paddle boards, e.g. SUP boards; Accessories specially adapted therefor
27/34	<ul style="list-style-type: none"> 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}) 	32/45	<ul style="list-style-type: none"> {Fixation means for feet of the board user, e.g. footstraps}
27/36	<ul style="list-style-type: none"> {Arrangement of ship-based loading or unloading equipment} for floating cargo {(deployment or recovery of underwater vehicles using lifts of hoists B63B 27/16)} 	32/47	<ul style="list-style-type: none"> {Bindings, e.g. wakeboard bindings}
29/00	Accommodation for crew or passengers not otherwise provided for	32/50	<ul style="list-style-type: none"> Boards characterised by their constructional features
29/02	<ul style="list-style-type: none"> Cabins or other living spaces; Construction or arrangement thereof 	32/51	<ul style="list-style-type: none"> Inflatable boards, e.g. drop-stitch inflatable boards
2029/022	<ul style="list-style-type: none"> {Bathing platforms} 	32/53	<ul style="list-style-type: none"> Sectionalised boards, e.g. modular, dismountable or foldable boards
29/025	<ul style="list-style-type: none"> {Modular or prefabricated cabins} 	32/55	<ul style="list-style-type: none"> Multihull boards, e.g. of catamaran type
2029/027	<ul style="list-style-type: none"> {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} 	32/56	<ul style="list-style-type: none"> Boards convertible into vessels or other types of water sports boards, e.g. into sailboats, canoes or water-cycles
29/04	<ul style="list-style-type: none"> Furniture peculiar to vessels (floatable furniture B63C 9/30) 	32/57	<ul style="list-style-type: none"> Boards characterised by the material, e.g. laminated materials
2029/043	<ul style="list-style-type: none"> {Seats; Arrangements thereof on vessels} 	32/59	<ul style="list-style-type: none"> Boards characterised by their manufacturing process, e.g. moulded or 3D printed
2029/046	<ul style="list-style-type: none"> {Tables, e.g. foldable or stowable} 	32/60	<ul style="list-style-type: none"> Board appendages, e.g. fins, hydrofoils or centre boards
29/06	<ul style="list-style-type: none"> Fastening to floors 	32/62	<ul style="list-style-type: none"> characterised by the material, e.g. laminated materials; characterised by their manufacturing process
29/08	<ul style="list-style-type: none"> Storm guards on tables, e.g. fiddles 	32/64	<ul style="list-style-type: none"> Adjustable, e.g. by adding sections, by removing sections or by changing orientation or profile
29/10	<ul style="list-style-type: none"> Berths; Mounting ladders therefor 	32/66	<ul style="list-style-type: none"> Arrangements for fixation to the board, e.g. fin boxes or foil boxes
29/12	<ul style="list-style-type: none"> Self-levelling mountings 	32/68	<ul style="list-style-type: none"> Mast foot attachments, e.g. mast foot rails
29/14	<ul style="list-style-type: none"> Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships 	32/70	<ul style="list-style-type: none"> Accessories not specially adapted for a particular type of board, e.g. paddings or buoyancy elements
2029/145	<ul style="list-style-type: none"> {Collapsible or non-permanent privacy rooms, e.g. closets or changing rooms} 	32/73	<ul style="list-style-type: none"> for tethering users or objects to the board, e.g. leashes
29/16	<ul style="list-style-type: none"> Soil water discharges ({arrangements of installations for treating waste water or sewage B63J 4/006}) 	32/77	<ul style="list-style-type: none"> Arrangements for fixation of accessories to the board, e.g. inserts or rails
29/18	<ul style="list-style-type: none"> Arrangements or adaptations of swimming pools 	32/80	<ul style="list-style-type: none"> Arrangements specially adapted for stowing or transporting water sports boards
29/20	<ul style="list-style-type: none"> Arrangements or adaptations of ladders (mounting ladders for berths B63B 29/10) 	32/83	<ul style="list-style-type: none"> for stowing, e.g. racks or straps
29/205	<ul style="list-style-type: none"> {on masts} 	32/87	<ul style="list-style-type: none"> for carrying, e.g. board bags
29/22	<ul style="list-style-type: none"> Galleys 	34/00	Vessels specially adapted for water sports or leisure; Body-supporting devices specially adapted for water sports or leisure (water sports boards B63B 32/00; swimming frameworks A63B 35/00; propulsion arrangements actuated by muscle power B63H 16/00)
32/00	Water sports boards; Accessories therefor		
NOTE		NOTE	
This group covers: floating structures having a substantially thin body with respect to the width, usually meant to carry one user, which are specially adapted for water sports or leisure, e.g. surfboards, windsurfing boards, wakeboards,		This group covers floating structures supporting the user's body and moving on the water surface, which are specially adapted for water sports or leisure.	

34/05	• {Vessels specially adapted for hunting or fishing}	35/06	• . . for moving cable-ends from ship to shore
34/10	• Power-driven personal watercraft, e.g. water scooters (water jet propulsion B63H 11/00; jet steering B63H 25/46); Accessories therefor	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}
34/15	• . . for hydroflight sports		NOTE
34/20	• Canoes, kayaks or the like		Subject matter concerning vessels, or floating structures adapted at the same time for another particular purpose are also classified in the respective other particular groups of 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.
34/21	• . . characterised by constructional features		
34/22	• . . . Inflatable; having inflatable parts		
34/23	• . . . Sectionalised, e.g. modular, collapsible or foldable		
34/26	• Accessories for canoes, kayaks or the like (effecting propulsion by muscle power B63H 16/00; outboard propulsion units B63H 20/00)		
34/30	• Rowing boats specially adapted for racing; Accessories therefor (effecting propulsion by rowing B63H 16/00)	35/083	• . {Ice-breakers (B63B 35/10, B63B 35/12 take precedence)}
34/40	• Body-supporting structures dynamically supported by foils under water	35/086	• . {Vessels for displacing icebergs, or related methods (tugs in general B63B 35/66)}
34/45	• . . Accessories therefor	35/10	• . . having forced pitching or rolling equipment
34/50	• Body-supporting buoyant devices, e.g. bathing boats or water cycles (swimming aids A63B 31/00)	35/12	• . . having ice-cutters
34/52	• . . Inflatable or partly inflatable	35/14	• Fishing vessels (fishing A01K 69/00 - A01K 97/00)
34/54	• . . specially adapted for being towed, e.g. banana boats, water sledges or towed buoys (arrangements for towing B63B 34/60)	35/16	• . . Trawlers
34/56	• . . for use in a standing position, e.g. water shoes, water walking devices or buoyant skis	35/18	• . . . adapted to dragging nets aboard
34/565	• . . Accessories, e.g. sticks for water walking	35/20	• . . . adapted to hoisting nets aboard
34/60	• Arrangements for towing, e.g. for use with water-skis or wakeboards	35/22	• . . Whale catchers; Whale factory vessels
34/63	• . . Holding means for the user, e.g. handle bars or harnesses	35/24	• . . Fish holds
34/67	• . . Connection means on the towing watercraft, e.g. pylons, side poles or winches	35/26	• . . . for live fish
34/70	• Arrangements on vessels specially adapted for generating waves for surfing, wakeboarding or the like, e.g. ballast tanks	35/28	• Barges or lighters {(underwater-towed barges B63G 8/42; for transporting logs B63B 35/62)}
34/75	• . . Arrangements of wake plates	35/285	• . {Flexible barges, e.g. bags}
35/00	Vessels or similar floating structures specially adapted for specific purposes and not otherwise provided for	35/30	• . . self-discharging
2035/001	• {for beach loading or unloading, e.g. landing crafts}	35/301	• . . . {discharging by turning over part of or the whole barge}
2035/002	• {for inland waters, e.g. for use on canals or rivers}	35/303	• . . . {discharging by suction, pressing or washing}
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)}	35/305	• . . . {discharging by mechanical means}
2035/004	• {Passenger vessels, e.g. cruise vessels or the like}	35/306	• . . . {discharging through dump-gates on the bottom or sides of the barge}
2035/005	• {Search and rescue [SAR] vessels}	35/308	• . . . {Split barges interconnected hingedly or slidably}
2035/006	• {Unmanned surface vessels, e.g. remotely controlled}	35/32	• for collecting pollution from open water
2035/007	• . . {autonomously operating}		NOTE
2035/008	• . . {remotely controlled}		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
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}	35/34	• Pontoons (floating bridges E01D 15/14)
35/03	• Pipe-laying vessels (laying pipes under water F16L 1/12)	35/36	• . . foldable
35/04	• Cable-laying vessels	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 75/00)}

- 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
- 39/00** **Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude** ([for amphibious vehicles B60F 3/0038](#))
- 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](#))}
- 39/02 . to decrease vessel movements by displacement of masses
- 39/03 . . by transferring liquids
- 39/04 . to decrease vessel movements by using gyroscopes directly
- 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](#)})
- 39/061 . . {by using trimflaps, i.e. flaps mounted on the rear of a boat, e.g. speed boat}
- 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](#))}
- 2039/063 . . {the foils comprising flexible portions}
- 2039/065 . . {the foils being pivotal about an axis substantially parallel to the longitudinal axis of the vessel}
- 2039/066 . . {the lift generating devices using the Magnus effect}
- 2039/067 . . {effecting motion dampening by means of fixed or movable resistance bodies, e.g. by bilge keels}
- 2039/068 . . {the foils having a variable cross section, e.g. a variable camber}
- 39/08 . to decrease vessel movements by using auxiliary jets or propellers ([for steering or dynamic anchoring B63H 25/00](#))
- 39/10 . to decrease vessel movements by damping the waves, e.g. by pouring oil on water
- 2039/105 . . {by absorption of wave energy, e.g. by structured, wave energy absorbing hull surfaces}
- 39/12 . for indicating draught or load
- 39/14 . for indicating inclination or duration of roll
- 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 32/50; stabilising foils B63B 39/06)}**
- 2041/003 . {Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels}
- 2041/006 . . {Telescopically collapsible keels}
- 43/00** **Improving safety of vessels, e.g. damage control, not otherwise provided for** ([fire-fighting in ships A62C 3/10](#))
- 2043/003 . {Arrangements of emergency exits, e.g. for escape from engine rooms}
- 2043/006 . {Methods or installations specially adapted for detecting ingress of ambient water, e.g. leak detectors}
- 43/02 . reducing risk of capsizing or sinking ([by means of watertight doors in bulkheads B63B 43/24](#))
- 43/04 . . by improving stability
- 2043/042 . . . {using outboard booms supporting ballast, other than solid ballast or persons, e.g. carrying water-filled bags}
- 43/045 . . . {by decreasing the free surface effect of water entered in enclosed decks}

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}	59/00	Hull protection specially adapted for vessels; Cleaning devices specially adapted for vessels {(inhibiting corrosion of metals by anodic or cathodic protection C23F 13/00)}
43/06	. . . using ballast tanks (conduits for emptying or ballasting B63B 13/00)	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)
43/08	. . . by transfer of solid ballast	2059/025	. {pneumatic, e.g. inflatable}
43/085	. . . {the stabilising effect being provided by the weight of a person placed on an outrigger seat swingable around a vertical axis}	59/04	. Preventing hull fouling (anti-fouling paints C09D 5/16)
43/10	. . by improving buoyancy {(amphibious cycles B60F 3/0038)}	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)}
43/12	. . . using inboard air containers {or inboard floating members}	59/06	. Cleaning devices for hulls
2043/123	. . . . {using floaters mounted to the tip of a mast, e.g. inflatable}	2059/065	. {mounted on land-borne vehicles, e.g. travelling on the bottom of a dry-dock}
2043/126	. . . . {pneumatic, e.g. inflatable on demand}	59/08	. of underwater surfaces while afloat (B63B 59/10 takes precedence)
43/14	. . . using outboard floating members	2059/082	. . . {the devices being supported on arms or rods}
2043/145	. . . . {pneumatic, e.g. inflatable on demand}	2059/085	. . . {the devices being adapted for operation by divers}
43/16	. . . Temporary equipment for stopping leaks, e.g. collision mats	2059/087	. . . {the devices being adapted for being pulled across, or along the underwater surface to be cleaned, e.g. by ropes}
43/18	. preventing collision {or grounding}; reducing collision damage {(reducing pollution by collision B63B 25/082)}	59/10	. . using trolleys or the like driven along the surface
2043/185	. . {using shock absorbing telescoping buffers}	69/00	Equipment for shipping not otherwise provided for
43/20	. . Feelers	71/00	Designing vessels; Predicting their performance
43/24	. Arrangements of watertight doors in bulkheads	71/10	. using computer simulation, e.g. finite element method [FEM] or computational fluid dynamics [CFD]
43/26	. . of sliding type	71/20	. using towing tanks or model basins for designing
43/28	. . . with mechanical drive	73/00	Building or assembling vessels or marine structures, e.g. hulls or offshore platforms
43/30	. . . with fluid drive	73/10	. Building or assembling vessels from prefabricated hull blocks, i.e. complete hull cross-sections
43/32	. . of non-sliding type	73/20	. Building or assembling prefabricated vessel modules or parts other than hull blocks, e.g. engine rooms, rudders, propellers, superstructures, berths, holds or tanks
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)	73/30	. Moving or transporting modules or hull blocks to assembly sites, e.g. by rolling, lifting or floating
2045/005	. {comprising particular electric circuits}	73/40	. characterised by joining methods
45/02	. the devices being intended to illuminate the way ahead or other areas of environments	73/43	. . Welding, e.g. laser welding
45/04	. the devices being intended to indicate the vessel or parts thereof	73/46	. . Gluing; Taping; Cold-bonding
45/06	. the devices being intended to illuminate vessels' decks or interior	73/48	. . {Riveting}
45/08	. the devices being acoustic	73/49	. . {by means of threaded members, e.g. screws, threaded bolts or nuts}
49/00	Arrangements of nautical instruments or navigational aids (nautical measuring instruments G01C ; radio navigation, analogous arrangements using other waves G01S)	73/50	. characterised by forming methods, e.g. manufacturing of curved blocks
51/00	Marking of navigation route	73/60	. characterised by the use of specific tools or equipment; characterised by automation, e.g. use of robots
51/02	. with anchored lightships; by use of lighthouses	73/70	. characterised by using moulds; Moulds or plugs therefor
51/04	. with free-floating flares	73/72	. . characterised by plastic moulding, e.g. injection moulding, extrusion moulding or blow moulding
57/00	Tank {or cargo hold} cleaning specially adapted for vessels (tank cleaning in general B08B 9/08)	73/74	. . characterised by lamination of materials
2057/005	. {of ballast tanks, e.g. from deposits, biological organisms; Ship-borne installations therefor}		
57/02	. by washing		
57/04	. by ventilating		

75/00	Building or assembling floating offshore structures, e.g. semi-submersible platforms, SPAR platforms or wind turbine platforms	2207/02	• Variable ballast or buoyancy
		2207/04	• Pressure equalising or adjusting
77/00	Transporting or installing offshore structures on site using buoyancy forces, e.g. using semi-submersible barges, ballasting the structure or transporting of oil-and-gas platforms	2209/00	Energy supply or activating means
77/10	• specially adapted for electric power plants, e.g. wind turbines or tidal turbine generators	2209/02	• water activated switches
		2209/04	• water activated batteries
		2209/06	• fluid produced by reaction with water
		2209/08	• impact with water-surface or -bottom
		2209/10	• pyrotechnic means
		2209/12	• with time-delay
79/00	Monitoring properties or operating parameters of vessels in operation	2209/14	• energy generated by movement of the water
79/10	• using sensors, e.g. pressure sensors, strain gauges or accelerometers	2209/16	• nuclear energy
79/15	• . for monitoring environmental variables, e.g. wave height or weather data	2209/18	• solar energy
79/20	• using models or simulation, e.g. statistical models or stochastic models	2209/20	• wind energy
79/30	• for diagnosing, testing or predicting the integrity or performance of vessels	2211/00	Applications
79/40	• for controlling the operation of vessels, e.g. monitoring their speed, routing or maintenance schedules	2211/02	• Oceanography
		2211/04	• Diving
81/00	Repairing or maintaining vessels	2211/06	• Operation in ice-infested waters
83/00	Rebuilding or retrofitting vessels, e.g. retrofitting ballast water treatment systems	2213/00	Navigational aids and use thereof, not otherwise provided for in this class
83/10	• for increasing cargo capacity	2213/02	• using satellite radio beacon positioning systems, e.g. the Global Positioning System GPS
83/20	• for conversion to a different use, e.g. for converting tankers into a FPSO-FLNG units	2221/00	Methods and means for joining members or elements
83/30	• for improving energy efficiency, e.g. by improving hydrodynamics or by upgrading the power plant	2221/02	• by welding
83/40	• for reducing risks of pollution or contamination; for improving safety	2221/04	• by soldering
85/00	Dismantling or scrapping vessels	2221/06	• by riveting
		2221/08	• by means of threaded members, e.g. screws, threaded bolts or nuts
		2221/10	• using adhesives
		2221/12	• by means of hook and loop fasteners
		2221/14	• by means of zippers or the like
		2221/16	• by means of ties, ribbons or the like
		2221/18	• by sewing, stitching, stapling or the like methods
		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
		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
		2221/24	• . by means that allow one or more degrees of translational freedom, e.g. telescopic joints, not otherwise provided for in this class
2201/00	Signalling devices	2231/00	Material used for some parts or elements, or for particular purposes
2201/02	• Audible	2231/02	• Metallic materials
2201/04	• Illuminating	2231/04	• . Irons, steels or ferrous alloys
2201/06	• . by combustion of fluid	2231/06	• . . Stainless steels
2201/08	• . Electric light	2231/10	• . Aluminium or aluminium alloys
2201/10	• Smoke producing	2231/12	• . Copper or copper alloys
2201/12	• Reflecting means	2231/14	• . . Bronze, e.g. nickel-aluminium bronze
2201/14	• Balloon	2231/16	• . . Brass
2201/16	• Radio	2231/18	• . Titanium or titanium alloys
2201/18	• Sonar	2231/20	• . Magnesium or magnesium alloys
2201/20	• Antenna or mast	2231/28	• . Shape-memory alloys
2201/22	• Spread-open chemicals or other products	2231/30	• Magnetic materials
2201/24	• by means of bubbles	2231/32	• Vegetable materials or material comprising predominately vegetable material
2201/26	• signalling anomalies, e.g. rupture of connection		
2203/00	Communication means		
2203/02	• telephone		
2205/00	Tethers		
2205/02	• Tether payout means		
2205/04	• . comprising means for controlling payout		
2205/06	• . Reels for tethers		
2205/08	• with means for recovering submerged objects		
2207/00	Buoyancy or ballast means		

Indexing schemes associated with subclasses **B63B**, **B63C**, **B63G**, **B63H** and **B63J**, relating to aspects of particular or unusual use, materials, design, methods or means.

- 2231/34 . . Wood or wood products
- 2231/40 . Synthetic materials
- 2231/42 . . Elastomeric materials
- 2231/44 . . . Rubber
- 2231/46 Natural rubber or caoutchouc
- 2231/48 Synthetic rubber, e.g. silicone rubber, Neoprene, polyurethane
- 2231/50 . . Foamed synthetic materials
- 2231/52 . . Fibre reinforced plastics materials
- 2231/60 . Concretes
- 2231/62 . . Lightweight concretes
- 2231/64 . . Reinforced or armoured concretes
- 2231/66 . . . Fibre reinforced concretes, e.g. synthetic fibre reinforced concretes
- 2231/68 . . Prestressed concretes
- 2231/70 . Glass
- 2231/72 . . Hollow glass microspheres
- 2231/74 . Bituminous materials or the like
- 2231/76 . Ice
- 2241/00 Design characteristics**
- 2241/02 . Design characterised by particular shapes
- 2241/04 . . by particular cross sections
- 2241/06 . . . circular
- 2241/08 . . . polygonal
- 2241/10 . . by particular three dimensional shapes
- 2241/12 . . . annular or toroidal
- 2241/14 . . . spherical
- 2241/16 . . . polyhedral
- 2241/20 . Designs or arrangements for particular purposes not otherwise provided for in this class
- 2241/22 . . for providing redundancy to equipment or functionality of a vessel, e.g. for steering
- 2241/24 . . for facilitating transport, e.g. hull shape with limited dimensions
- 2241/26 . . . for transport on roads, e.g. hull shape with maximum dimensions for public roads
- 2241/28 . . . for airborne transport