

CPC**COOPERATIVE PATENT CLASSIFICATION****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](#) to [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.

B63B 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](#))

- B63B 1/02 . deriving lift mainly from water displacement ([B63B 1/16](#) takes precedence)
- B63B 1/04 . . with single hull
- B63B 1/041 . . . { with disk-shaped hull }
- B63B 1/042 . . . { the underpart of which being partly provided with channels or the like, e.g. catamaran shaped }
- B63B 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](#)) }
- B63B 1/048 . . . { with hull extending principally vertically }
- B63B 1/06 . . . Shape of fore part
- B63B 1/063 { Bulbous bows }
- B63B 1/08 . . . Shape of after part
- B63B 1/10 . . with multiple hulls
- B63B 1/105 . . . { comprising a cockpit surrounded and pivotally supported by at least three floats }
- B63B 1/107 . . . { Semi-submersibles; Small waterline area multiple hull vessels and the like, e.g. SWATH }

WARNING

Not complete, see [B63B 1/12](#) and subgroups

- B63B 1/12 . . . the hulls being interconnected rigidly ({ [B63B 1/107](#) takes precedence })
- B63B 1/121 { comprising two hulls ([B63B 1/107](#) takes precedence) }
- B63B 1/125 { comprising more than two hulls ([B63B 1/107](#) takes precedence) }
- B63B 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](#)) }

WARNING

Not complete, pending a reorganisation, see [B63B 1/12](#) and subgroups

- B63B 1/16 . deriving additional lift from hydrodynamic forces
- B63B 1/18 . . of hydroplane type
- B63B 1/20 . . . having more than one planing surface ([B63B 1/22](#) takes precedence)

WARNING

Not complete, pending a reorganisation, see [B63B 1/042](#)

- B63B 1/22 . . . with adjustable planing surfaces
- B63B 1/24 . . of hydrofoil type { ([controlling attitude or depth of underwater vessels by hydrofoils or the like B63G 8/18](#)) }

WARNING

This group is pending a reorganisation, also documents covered by group [B63B 1/26](#) are within this group

- B63B 1/242 . . . { [Mounting, suspension of the foils \(B63B 1/30 takes precedence \)](#) }
- B63B 1/244 . . . { [Safety systems, e.g. when striking an object](#) }
- B63B 1/246 . . . { [Arrangements of propulsion elements \(propulsion elements in general B63H 5/00 , propulsion by jets in general B63H 11/00 \)](#) }
- B63B 1/248 . . . { [Shape, hydrodynamic features, construction of the foil](#) }
- B63B 1/26 . . . having more than one hydrofoil ([B63B 1/28](#) takes precedence)

WARNING

Not complete, pending a reorganisation, see [B63B 1/24](#) and subgroups

- B63B 1/28 . . . with movable hydrofoils
- B63B 1/283 { [movable around a vertical axis, e.g. for steering](#) }
- B63B 1/285 { [changing the angle of attack or the lift of the foil](#) }
- B63B 1/286 { [using flaps](#) }
- B63B 1/288 { [using gas exhaust through the foil](#) }
- B63B 1/30 retracting or folding { [B63B 1/244](#) takes precedence }
- B63B 1/32 . Other means for varying the inherent hydrodynamic characteristics of hulls
- B63B 1/322 . . { [using aerodynamic elements, e.g. aerofoils producing a lifting force \(flying boats B64C 35/00 \)](#) }
- B63B 1/34 . . by reducing surface friction
- B63B 1/36 . . . using mechanical means
- B63B 1/38 . . . using air bubbles or air layers { [gas filled volumes \(waterborne vessels travelling on air cushions B60V 3/06 \)](#) }
- B63B 1/40 . . by diminishing wave resistance

B63B 3/00 **Constructions of hulls** ([non-metallic hulls B63B 5/00](#) ; designing, building, maintaining or repairing methods [B63B 9/00](#))

- B63B 3/02 . Hulls assembled from prefabricated sub-units

- B63B 3/04 . . . with permanently-connected sub-units
- B63B 3/06 . . . the sub-units being substantially identical
- B63B 3/08 . . . with detachably-connected sub-units
- B63B 3/09 . Hulls constructed of non-magnetic metal
- B63B 3/10 . Armoured hulls
- B63B 3/12 . Frameless hulls
- B63B 3/13 . Hulls built to withstand hydrostatic pressure when fully submerged, e.g. submarine hulls
- B63B 3/14 . Hull parts ([hull armour B63B 3/10](#))
- B63B 3/142 . . { [Connections between the shell and deck](#) }
- B63B 3/16 . . Shells ([ports or closures therefor B63B 19/00](#))
- B63B 3/18 . . . characterised by being formed predominantly of parts that may be developed into plane surfaces
- B63B 3/185 { [comprising only flat panels](#) }
- B63B 3/20 . . . of double type
- B63B 3/22 . . . with corrugations
- B63B 3/24 . . . Means for diminishing external ridges of protrusions
- B63B 3/26 . . Frames
- B63B 3/28 . . . of transverse type; Stringers
- B63B 3/30 Bilge knees; Beam knees
- B63B 3/32 . . . Web frames; Web beams
- B63B 3/34 . . . of longitudinal type; Bulkhead connections
- B63B 3/36 . . . Combined frame systems
- B63B 3/38 . . Keels ([movable keels B63B 41/00](#))
- B63B 3/40 . . Stern posts; Stern frames
- B63B 3/42 . . Shaft brackets
- B63B 3/44 . . Bilge keels ([stabilising aspect B63B 39/06](#))
- B63B 3/46 . . Stems
- B63B 3/48 . . Decks ([planking B63B 5/06](#))
- B63B 3/50 . . . of vaulted type
- B63B 3/52 . . . Pillars; Deck girders
- B63B 3/54 . . . Hatch openings
- B63B 3/56 . . Bulkheads; Bulkhead reinforcements ([arrangements of water-tight doors B63B 43/24](#))
- B63B 3/58 . . . with flat plating
- B63B 3/60 . . . with curved or corrugated plating
- B63B 3/62 . . Double bottom; Tank tops
- B63B 3/64 . . . Keelsons
- B63B 3/66 . . Gratings
- B63B 3/68 . . Panelling; Lining, e.g. for insulating purposes

B63B 3/70 . . Reinforcements for carrying localised loads, e.g. propulsion plant, guns

B63B 5/00 Hulls characterised by their construction of non-metallic material

B63B 5/02 . made predominantly of wood

B63B 5/04 . . Carcasses

B63B 5/06 . . Decks; Shells

B63B 5/065 . . . { caulking decks (mortise chisels for wood [B25D 3/00](#)) }

B63B 5/08 . . . with single-layer planking

B63B 5/10 . . . with multiple-layer planking

B63B 5/12 . made predominantly of wood with metal reinforcement, i.e. composite construction

B63B 5/14 . made predominantly of concrete, e.g. reinforced

B63B 5/16 . . monolithic

B63B 5/18 . . built-up from elements

B63B 5/20 . . . in combination with elements of other materials

B63B 5/22 . . with reinforcing members external to shell

B63B 5/24 . made predominantly of plastics {(surf boards [B63B 35/7909](#)) }

B63B 7/00 Collapsible, foldable, inflatable or like vessels (foldable pontoons [B63B 35/36](#))

B63B 7/02 . comprising only rigid parts

B63B 7/04 . . sectionalised

B63B 7/06 . having parts of non-rigid material

B63B 7/08 . . inflatable

B63B 7/082 . . . { having parts of rigid material }

B63B 7/085 . . . { Accessories or mountings specially adapted therefor, e.g. seats, sailing kits, motor mountings }

B63B 7/087 { Motor mountings, e.g. transom panels for outboard motors }

B63B 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](#))

B63B 9/001 . { Methods of designing, or determining properties of vessels by means of analytical modelling, e.g. computational }

WARNING

Not complete pending a reorganisation, see [B63B 9/00](#) and [G06F 17/50](#)

B63B 9/002 . . { using fluid dynamics analysis, e.g. computational fluid dynamics }

WARNING

Not complete pending a reorganisation, see [B63B 9/00](#) and [G06F 17/50](#)

- B63B 9/003 . . { using structure analysis, e.g. finite elements }

WARNING

Not complete pending a reorganisation, see [B63B 9/00](#) and [G06F 17/5018](#)

- B63B 9/02 . Using towing tanks or model basins for designing {(arrangements in or on ship testing tanks or water tunnels [G01M 10/00](#))}

- B63B 9/04 . Rebuilding ships, e.g. increasing tonnage

- B63B 9/06 . Methods of building hulls

- B63B 9/062 . . { by folding (foldable vessels [B63B 7/00](#))}

- B63B 9/065 . . { for floating offshore platforms (grounded platforms [E02B 17/00](#))}

WARNING

Not complete, see [B63B 21/50](#) , [B63B 35/00 L](#), [B63B 35/44](#)

- B63B 9/08 . Determining vessel properties with respect to stability or balance

B63B 11/00 Interior subdivision of hulls (bulkhead space construction [B63B 3/56](#))

- B63B 11/02 . Arrangement of bulkheads, e.g. defining cargo spaces

- B63B 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](#))

WARNING

Not complete pending reclassification; see also [B63B 25/08](#) and subgroups

- B63B 11/06 . Propeller-shaft tunnels

B63B 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](#))

- B63B 13/02 . Ports for passing water through vessels` sides {(jet propulsors with clogging prevention means [B63H 11/01](#))}

B63B 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](#) })

B63B 15/0083 . { Masts for sailing ships or boats }

B63B 15/02 . Staying of masts or of other superstructures

B63B 17/00 **Vessel 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](#)) }

WARNING

Not complete pending a reorganisation; for documents concerning protective caps, or anti-theft devices other than using keys, see [B63J 99/00](#)

B63B 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](#) to [E02D 27/00](#)) }

WARNING

Documents concerning "externally attached cofferdams or the like" are not complete, pending a reorganisation; see also [B63B 9/00](#)

B63B 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](#)) }

WARNING

Not complete pending reclassification; see also [B63B 25/08](#) and subgroups

B63B 17/0036 . . { Arrangements for minimizing pollution by accidents (associated with cargo tanks [B63B 25/082](#)) }

B63B 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](#)) }

B63B 17/02 . Awnings { ,including rigid weather protection structures, e.g. sunroofs; Tarpaulins; Accessories for awnings or tarpaulins }

B63B 17/023 . . { Hatchway tents, e.g. for weather protection of cargo during loading or unloading }

B63B 17/04 . Stanchions; Guard-rails; { Bulwarks or the like }

B63B 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](#)) }

B63B 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](#))

- B63B 19/02 . Clear-view screens; { [Windshields](#) ([canopies connected to windshields B63B 17/02](#)) }
- B63B 19/04 . Air-catching equipment related to windows or port-holes ([ventilation B63J 2/00](#))
- B63B 19/06 .. readily detachable
- B63B 19/08 . Ports or like openings in vessels' sides { [or at the vessels' bow or stern](#) ([forming ramps when open B63B 27/143](#)) }
- B63B 19/10 .. Coal ports
- B63B 19/12 . Hatches; Hatchways ([hatch coamings B63B 3/54](#))
- B63B 19/14 .. Hatch covers ([opening devices in general E05F](#))
- B63B 19/16 ... with detachable boards
- B63B 19/18 ... slidable
- B63B 19/19 ... foldable
- B63B 19/197 actuated by fluid pressure
- B63B 19/203 actuated by cables or the like
- B63B 19/21 ... of roll-up type
- B63B 19/22 .. Hatch beams
- B63B 19/24 .. Hatch fastenings, e.g. cleats
- B63B 19/26 .. Gaskets; Draining means
- B63B 19/28 .. Other safety means

B63B 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](#)

- B63B 21/02 . Magnetic mooring equipment
- B63B 21/04 . Fastening or guiding equipment for chains, ropes, hawsers, or the like { ([means for fastening cables or ropes in general F16G 11/00](#)) }
- B63B 21/045 .. { [T-shaped cleats](#) }
- B63B 21/06 .. Bollards
- B63B 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](#) })
- B63B 21/10 .. Fairleads
- B63B 21/12 .. Rat guards
- B63B 21/14 .. Hawse-holes; Hawse-pipes; Hawse-hole closures

- B63B 21/16 . Using winches ([winches per se B66D](#))
 - B63B 21/18 . Stoppers for anchor chains {([anchor capstans B66D 1/72](#))}
 - B63B 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](#) }
- WARNING**
- Not complete pending a reorganisation, see [B63B 21/00](#)
-
- B63B 21/22 . Handling or lashing of anchors
 - B63B 21/227 . . { Stowing the anchor inside the vessel by hauling-in through an aperture in the side walls, stern or bottom }
 - B63B 21/24 . Anchors
 - B63B 21/243 . . { foldable or capable of being disassembled }
- WARNING**
- this group is pending a reorganisation, also documents covered by group [B63B 21/36](#) are within this group
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- B63B 21/26 . . securing to bed
 - B63B 21/27 . . . by suction
 - B63B 21/28 . . . driven in by explosive charge
 - B63B 21/29 . . . by weight, e.g. flukeless weight anchors
 - B63B 21/30 . . rigid when in use {([B63B 21/28](#) takes precedence)}
 - B63B 21/32 . . . with one fluke
 - B63B 21/34 . . . with two or more flukes
 - B63B 21/36 foldable
- WARNING**
- Not complete, pending a reorganisation, see [B63B 21/243](#)
-
- B63B 21/38 . . pivoting when in use {([B63B 21/28](#) takes precedence)}
 - B63B 21/40 . . . with one fluke
 - B63B 21/42 of ploughshare type
 - B63B 21/44 . . . with two or more flukes
 - B63B 21/46 . . with variable, { e.g. }sliding, connection to the chain, { especially for facilitating the retrieval of the anchor }
 - B63B 21/48 . . Sea-anchors; Drogues
 - B63B 21/50 . Anchoring arrangements { or methods }for special vessels, e.g. for floating drilling platforms or dredgers
 - B63B 21/502 . . { by means of tension legs }
 - B63B 21/507 . . { with mooring turrets }

WARNING

this group and its subgroup are pending a reorganisation, also documents covered by group [B63B 21/34](#) are within this group, and its subgroups

- B63B 21/508 . . . { connected to submerged buoy (mooring buoys per se [B63B 22/02](#))}
- B63B 21/54 . Boat-hooks or the like { , e.g. hooks detachably mounted to a pole }
- B63B 21/56 . Towing or pushing equipment (tugs [B63B 35/66](#) ; { towing devices for waterskis or watersledges [B63B 35/815](#) })
- B63B 21/58 . . Adaptations of hooks for towing; Towing-hook mountings (hooks in general [F16B](#))
- B63B 21/60 . . . Quick releases
- B63B 21/62 . . characterised by moving of more than one vessel (rigid interconnections between pontoons [B63B 35/38](#))
- B63B 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)
- B63B 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](#))
- B63B 21/663 . . . { Fairings }
- B63B 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](#) })
- B63B 22/003 . { adapted for being launched from an aircraft or water vehicle; , e.g. with brakes deployed in the water }
- B63B 22/02 . specially adapted for mooring a vessel
- B63B 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](#)) }

WARNING

1. Documents concerning container type buoys having means to selectively release contents and not being adapted for mooring a vessel are in the process of being reorganised to [B63B 22/26](#) . 2. This group and its subgroups are pending a reorganisation, also documents covered by groups [B63B 27/30](#) and [B63B 27/34](#) are within this group and its subgroups.

- B63B 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](#)) }

WARNING

Documents concerning container type buoys submerged when not in use and not being adapted for mooring a vessel are in the process of being

reorganised to [B63B 22/28](#)

- B63B 22/025 . . . { and comprising a restoring force in the mooring connection provided by means of weight, float or spring devices }
- B63B 22/026 . . . { and with means to rotate the vessel around the anchored buoy ([turrets B63B 21/507](#)) }
- B63B 22/04 . { [Fixations or other](#) } anchoring arrangements
- B63B 22/06 . . with means to cause the buoy to surface in response to a transmitted signal ({ [B63B 22/023 takes precedence](#) })
- B63B 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
- B63B 22/10 . . . Water soluble or water weakened means, i.e. buoy released by buoy-to-object securing means being destroyed on contact with water
- B63B 22/12 . . . the surfacing of the buoy being assisted by a gas released or generated on submergence of the buoy
- B63B 22/14 . . . Buoy-to-object securing means responsive to hydrostatic pressure
- B63B 22/16 . specially adapted for marking a navigational route ([signalling or lighting devices B63B 45/00](#))
- B63B 22/163 . . { [comprising a bell or other audible signal](#) }
- B63B 22/166 . . { [comprising a light](#) }
- B63B 22/18 . having means to control attitude or position, e.g. reaction surfaces or tether
- B63B 22/20 . . Ballast means
- B63B 22/22 . Inflatable buoys with gas generating means ([B63B 22/12 takes precedence](#))
- B63B 22/24 . container type, i.e. having provision for the storage of material
- B63B 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](#))

WARNING

Not complete, pending a reorganisation; see [B63B 22/021](#) and [B63B 22/24](#)

- B63B 22/28 . . submerged when not in use ({ [B63B 22/023 takes precedence](#) })

WARNING

Not complete, pending a reorganisation; see [B63B 22/023](#) and [B63B 22/24](#)

B63B 23/00 Equipment for handling lifeboats or the like

- B63B 23/02 . Davits, i.e. devices having arms for lowering boat by cables or the like
- B63B 23/04 . . with arms pivoting on substantially horizontal axes, e.g. gravity type
- B63B 23/06 . . . with actual pivots

- B63B 23/08 the arms being articulated
- B63B 23/10 with positive drive of the arms
- B63B 23/12 . . . with simulated pivots
- B63B 23/14 using linkages
- B63B 23/16 using guide tracks
- B63B 23/18 . . with arms pivoting on substantially vertical axes
- B63B 23/20 . . . Davits with single arms ([cranes in general B66C](#))
- B63B 23/22 Slings or the like therefor
- B63B 23/24 . . . Slewing equipment therefor
- B63B 23/26 . . with rectilinear translation of boat before lowering

- B63B 23/28 . Devices for projecting or releasing boats for free fall

- B63B 23/30 . Devices for guiding boats to water surface
- B63B 23/32 . . Rigid guides, e.g. having arms pivoted near waterline
- B63B 23/34 . . Guiding means for lowering by cables, e.g. for listing ships
- B63B 23/36 . . . Skid fenders

- B63B 23/38 . Transport of boats to davits or the like

- B63B 23/40 . Use of lowering or hoisting gear
- B63B 23/42 . . with braking equipment
- B63B 23/44 . . . on the ship
- B63B 23/46 . . . in the boat
- B63B 23/48 . . Using winches for boat handling ([winches per se B66D](#))
- B63B 23/50 . . . with tensioning gear
- B63B 23/52 . . . with control of winches from boat
- B63B 23/54 . . with trimming equipment
- B63B 23/56 . . . controlled from boat
- B63B 23/58 . . with tackle engaging or release gear

WARNING

this group is pending a reorganisation, also documents covered by group [B63B 23/70](#) are within this group

- B63B 23/60 . . Additional connections between boat and davits

- B63B 23/62 . Fastening or storing of boats on deck
- B63B 23/64 . . Lashings; Covers
- B63B 23/66 . . Blocks; Chocks
- B63B 23/68 . . . for stacking boats

- B63B 23/70 . Condition-responsive handling equipment, e.g. automatic release of boat from lowering tackle upon contact with water

WARNING

Not complete, pending a reorganisation, see [B63B 23/58](#)

- B63B 25/00** **Load-accomodating 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 \[B63B 19/12\]\(#\) \)](#)
- [B63B 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 \[B63B 25/28\]\(#\) \)](#) }
- [B63B 25/004](#) .. { [for containers \(\[B63B 25/28\]\(#\) takes precedence \)](#) }
- [B63B 25/006](#) .. { [for floating containers, barges or other floating cargo \(for transporting marine vessels \[B63B 35/40\]\(#\) \)](#) }
- [B63B 25/008](#) .. { [for wheeled cargo \(\[B63B 25/20\]\(#\) takes precedence \)](#) }
- [B63B 25/02](#) . for bulk goods
- [B63B 25/04](#) .. solid
- [B63B 25/06](#) ... for cereals
- [B63B 25/08](#) .. fluid {([constructional features of bunkers \[B63B 11/04\]\(#\) ; tanks for fuel or the like not forming bunkers \[B63B 17/0027\]\(#\) \)}](#)
- WARNING**
- Documents in [B63B 25/08](#) and subgroups concerning bunkers and other tanks for fuel or the like are in the process of being reclassified to [B63B 11/04](#) and [B63B 17/00 F](#)
- [B63B 25/082](#) ... { [Arrangements for minimizing pollution by accidents \(associated with tanks for fuel or the like not forming bunkers \[B63B 17/0036\]\(#\) \)](#) }
- [B63B 25/10](#) ... open to ambient air
- [B63B 25/12](#) ... closed
- [B63B 25/14](#) pressurised
- [B63B 25/16](#) heat-insulated ([insulating panelling \[B63B 3/68\]\(#\) ; heating or cooling \[B63J\]\(#\) \)](#))
- [B63B 25/18](#) . Detachable decks
- [B63B 25/20](#) .. for motor vehicles or the like
- [B63B 25/22](#) . for palletised articles
- [B63B 25/24](#) . Means for preventing unwanted cargo movement, e.g. dunnage
- [B63B 25/26](#) . for frozen goods
- [B63B 25/28](#) . for deck loads
- B63B 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. \[B65G\]\(#\), \[B66C\]\(#\), \[B67D\]\(#\) \)](#) }

WARNING

The scope of this group is broader than the scope of the corresponding IPC group, and includes the scope of the IPC2 subgroups [B63B 27/02](#) , [B63B 27/06](#) , and [B63B 27/20](#)

- [B63B 27/02](#) . with intermittent action
- [B63B 27/04](#) . . Ships` derricks, i.e. employing ships` masts ([derricks in general B66C](#))
- [B63B 27/06](#) . . . with slewing force exerted at pivoted end
- [B63B 27/08](#) . . using winches ([winches per se B66D](#))
- [B63B 27/10](#) . . using cranes ([cranes per se B66C](#))
- [B63B 27/12](#) . . . of gantry type
- [B63B 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](#) }
- [B63B 27/143](#) . . . { [Ramps](#) }
- [B63B 27/146](#) . . . { [Pilot ladders or similar outboard ladders, e.g. bathing ladders; Pilot lifts](#) }
- [B63B 27/16](#) . . using lifts or hoists ([elevators per se B66B](#)) { [Pilot lifts B63B 27/14](#) }
- [B63B 27/18](#) . . using cableways, e.g. with breeches-buoys ([cableways per se B65G](#))

WARNING

this group is pending a reorganisation, also documents covered by group [B63B 27/32](#) are within this group

- [B63B 27/20](#) . with continuous action
- [B63B 27/22](#) . . 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](#) ; [conveyers per se B65G](#))
- [B63B 27/24](#) . . Loading or unloading fluids

WARNING

this group is pending a reorganisation, also documents covered by group [B63B 27/25](#) are within this group

- [B63B 27/25](#) . . . { [Arrangement of ship-based loading or unloading equipment](#) }for fluidised bulk material

WARNING

Not complete, pending a reorganisation, see [B63B 27/24](#)

- [B63B 27/26](#) . . using devices with throwing action ([devices with throwing action per se B65G](#))
- [B63B 27/28](#) . . using chutes ([chutes per se B65G](#))
- [B63B 27/30](#) . { [Arrangement of ship-based loading or unloading equipment](#) }for transfer at sea between ships or between ships and off-shore structures

WARNING

Not complete, pending a reorganisation, see [B63B 22/02](#) B, [B63B 35/44](#) , and subgroups

- [B63B 27/32](#) . . using cableways

WARNING

Not complete, pending a reorganisation, see [B63B 27/18](#)

- [B63B 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 \[B63B 22/021\]\(#\) \) }](#)

WARNING

Not complete, pending a reorganisation, see [B63B 21/50](#) T, [B63B 22/02](#) B, [B63B 35/44](#) and subgroups

- [B63B 27/36](#) . { [Arrangement of ship-based loading or unloading equipment](#) }for floating cargo ([devices for facilitating retrieval of floating objects per se \[B66C 13/02\]\(#\) \)](#)

[B63B 29/00](#) Accomodation for crew or passengers not otherwise provided for

- [B63B 29/02](#) . Cabins or other living spaces; Construction or arrangement thereof

- [B63B 29/025](#) . . { [Modular or prefabricated cabins](#) }

- [B63B 29/04](#) . . Furniture peculiar to vessels ([floatable furniture \[B63C 9/30\]\(#\) \)](#)

- [B63B 29/06](#) . . . Fastening to floors

- [B63B 29/08](#) . . . Storm guards on tables, e.g. fiddles

- [B63B 29/10](#) . . . Berths; Mounting ladders therefor

- [B63B 29/12](#) . . . Self-levelling mountings

WARNING

this group is pending a reorganisation, also documents covered by group [B63B 35/50](#) and subgroups are in this group

- [B63B 29/14](#) . . Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships

- [B63B 29/16](#) . Soil water discharges {([arrangements of installations for treating waste water or sewage \[B63J 4/006\]\(#\) \) }](#)

- [B63B 29/18](#) . Arrangements or adaptations of swimming pools

- [B63B 29/20](#) . Arrangements or adaptations of ladders ([mounting ladders for berths \[B63B 29/10\]\(#\) \)](#)

- [B63B 29/205](#) . . { [on masts](#) }

- [B63B 29/22](#) . Galleys

B63B 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](#) })

[B63B 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](#)) }

[B63B 35/03](#) . Pipe-laying vessels (laying pipes under water [F16L 1/12](#))

[B63B 35/04](#) . Cable-laying vessels

[B63B 35/06](#) . . for moving cable-ends from ship to shore

[B63B 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

NOTE

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 35/00](#) , e.g. floating buildings, stores, drilling platforms or workshops for operation in ice infested waters are also classified in [B63B 35/44](#)]

WARNING

1. Not complete, pending a reclassification, see also [B63B 35/00](#) and subgroups, e.g. [B63B 35/44](#) . 2. This group is pending a reorganisation, also documents covered by group [B63B 35/083](#) are within this group

[B63B 35/083](#) . . { Ice-breakers ([B63B 35/10](#) , [B63B 35/12](#) take precedence) }

WARNING

Not complete, pending a reorganisation, see [B63B 35/08](#)

[B63B 35/086](#) . . { Vessels for displacing icebergs, or related methods (tugs in general [B63B 35/66](#)) }

[B63B 35/10](#) . . having forced pitching or rolling equipment

[B63B 35/12](#) . . having ice-cutters

[B63B 35/14](#) . Fishing vessels (fishing [A01K 69/00](#) to [A01K 97/00](#))

[B63B 35/16](#) . . Trawlers

[B63B 35/18](#) . . . adapted to dragging nets aboard

[B63B 35/20](#) . . . adapted to hoisting nets aboard

[B63B 35/22](#) . . Whale catchers; Whale factory vessels

[B63B 35/24](#) . . Fish holds

[B63B 35/26](#) . . . for live fish

[B63B 35/28](#) . Barges or lighters ((underwater-towed barges [B63G 8/42](#) ; for transporting logs

- [35/62](#))}
- B63B 35/285 . . { Flexible barges, e.g. bags }
 - B63B 35/30 . . self-discharging
 - B63B 35/301 . . . { discharging by turning over part of or the whole barge }
 - B63B 35/303 . . . { discharging by suction, pressing or washing }
 - B63B 35/305 . . . { discharging by mechanical means }
 - B63B 35/306 . . . { discharging through dump-gates on the bottom or sides of the barge }
 - B63B 35/308 . . . { Split barges interconnected hingedly or slidably }
 - B63B 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](#)

- B63B 35/34 . Pontoons ([floating bridges E01D 15/14](#))
- B63B 35/36 . . foldable
- B63B 35/38 . . Rigidly-interconnected pontoons
- B63B 35/40 . for transporting marine vessels {([load accomodation for floating barges and the like B63B 25/006](#))}
- B63B 35/42 . . with adjustable draught
- B63B 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](#))}

WARNING

This group and its subgroups are pending a reorganisation, also documents covered by groups [B63B 27/30](#) , [B63B 27/32](#) and [B63B 27/34](#) are within this group and its subgroups.

- B63B 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 }
- B63B 35/4413 . . { Floating drilling platforms, e.g. carrying water-oil separating devices }
- B63B 35/50 . Vessels or floating structures for aircraft ([aircraft carriers B63G 11/00](#) ; [flying-boat hulls, other flotation means for aircraft B64](#))

WARNING

1) not complete pending a reorganisation, see for self-levelling landing platforms also [B63B 29/12](#) ; 2) this group and its subgroup [B63B 35/52](#) are pending a reorganisation, also documents covered by group [B63B 35/53](#) are in this group and its subgroups

- B63B 35/52 . . Nets, slipways or the like, for recovering aircraft from the water

WARNING

This group is pending a reorganisation, also documents covered by group [B63B 35/53](#) are within this group.

[B63B 35/53](#) . . Floating runways

WARNING

Group [B63B 35/53](#) is not complete pending a reorganisation; see also groups [B63B 35/50](#) and [B63B 35/52](#)

[B63B 35/54](#) . Ferries ([propulsion of chain ferries B63H](#))

[B63B 35/56](#) . Lightships ([marking of navigational route B63B 51/00](#))

[B63B 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](#))

[B63B 35/607](#) . . having a platform or floor below the level of the buoyancy means, e.g. suspended basket type

[B63B 35/613](#) . . with tubular shaped flotation members

[B63B 35/62](#) . . formed from logs or the like

[B63B 35/66](#) . Tugs ([towing or pushing equipment B63B 21/56](#))

[B63B 35/665](#) . . { [Floating propeller units, i.e. a motor and propeller unit mounted in a floating box \(outboard propulsion units B63H 20/00 \)](#) }

[B63B 35/68](#) . . for towing

[B63B 35/70](#) . . for pushing

[B63B 35/71](#) . { [Canoes, kayaks or the like \(collapsible, foldable, inflatable or like vessels B63B 7/00 \)](#) }

[B63B 35/73](#) . Other vessels or like floating structures for pleasure or sport

[B63B 35/731](#) . . { [Waterscooters](#) }

[B63B 35/732](#) . . { [House boats](#) }

[B63B 35/74](#) . . Body supporting buoyant devices with seat; { [and bathing boats](#) }

[B63B 35/76](#) . . . Ring-shaped buoyant member

[B63B 35/78](#) . . . U-shaped buoyant member

[B63B 35/79](#) . . Surf-boards, e.g. sailboards

[B63B 35/7906](#) . . . { [Construction or shape of the boards](#) }

[B63B 35/7909](#) { [characterised by the arrangement of constructive parts made predominantly of plastics, e.g. layers](#) }

[B63B 35/7913](#) { [inflatable](#) }

[B63B 35/7916](#) { [sectionalised](#) }

[B63B 35/792](#) { [catamaran-shaped \(\[B63B 35/7923\]\(#\) takes precedence \)](#) }

[B63B 35/7923](#) { [with hydrofoils \(hydrofoils per se \[B63B 1/24\]\(#\) \)](#) }

B63B 35/7926	....	{ Fins, keels or steering devices acting on water }
B63B 35/793	.....	{ Fixations for fins which do not normally move during sailing, e.g. fixations that can be slidably set before sailing }
B63B 35/7933	...	{ Emergency arrangements and equipment; Other accessories (anti-theft devices using locks E05B 73/007) }
B63B 35/7936	....	{ Arrangements for the feet of the surfer }
B63B 35/7943	...	{ Motordriven boards }
B63B 35/7946	...	{ Stowing or transporting arrangements (transporting on vehicles B60R 9/08) }
B63B 35/795	...	{ transformable into another vehicle, e.g. sailboat, watercycle }
B63B 35/7953	...	{ Winddriven boards }
B63B 35/7959	....	{ Mast foot arrangements }
B63B 35/7966	....	{ Wishbone }
B63B 35/7969	.....	{ Connection to the mast }
B63B 35/7973	....	{ Sail arrangements }
B63B 35/7976	.....	{ Sails pivotally mounted at a mast-tip; Kite-sails (kites per se B64C 31/06) }
B63B 35/7979	.....	{ Control means for kite-sails; Harnesses for connecting kite-sails to a user, e.g. of quick release type }

WARNING

Not complete, see [B63B 35/7976](#) , [B64C 31/06](#)

B63B 35/7983	.....	{ Sails with detachable sections, e.g. to change the sail area }
B63B 35/7989	.....	{ Devices to tension the luff of the sail }
B63B 35/7993	....	{ Harnesses or handgrips }
B63B 35/7996	.....	{ with elastic connection to the wishbone }
B63B 35/81	..	Waterskis; Watersledges
B63B 35/811	...	{ with means for additional lift by provision of hollow bodies }
B63B 35/812	...	{ Bindings }
B63B 35/815	...	{ Towing devices }
B63B 35/816	....	{ Connection of the tow to the boat; using winches (winches per se B66D) }
B63B 35/817	....	{ Handles }
B63B 35/83	..	Water shoes; Bog shoes
B63B 35/85	..	Accessories not otherwise provided for, e.g. sticks for water skiing

B63B 38/00 **Vessels or like floating structures not otherwise provided for** (vessels characterised by load-accomodating 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](#))

B63B 39/00 **Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude** {(for amphibious vehicles [B60F 3/0038](#)) }

B63B 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](#)) }

- B63B 39/02 . to decrease vessel movements by displacement of masses
- B63B 39/03 . . by transferring liquids
- B63B 39/04 . to decrease vessel movements by using gyroscopes directly
- B63B 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](#) })
- B63B 39/061 . . { [by using trimflaps, i.e. flaps mounted on the rear of a boat, e.g. speed boat](#) }
- B63B 39/062 . . { [the foils being mounted on outriggers or the like, e.g. antidrift hydrofoils for sail boats \(\[hydrofoils B63B 1/24\]\(#\) ; \[drop keels B63B 41/00\]\(#\) \)](#) }
- B63B 39/08 . to decrease vessel movements by using auxiliary jets or propellers ([for steering or dynamic anchoring B63H 25/00](#))
- B63B 39/10 . to decrease vessel movements by damping the waves, e.g. by pouring oil on water
- B63B 39/12 . for indicating draught or load
- B63B 39/14 . for indicating inclination or duration of roll
- B63B 41/00** **Drop keels, e.g. centre boards, side boards** { [Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels](#) } ([keels integral with hull B63B 3/38](#) ; [stabilising foils B63B 39/06](#))
- B63B 43/00** **Improving safety of vessels, e.g. damage control, not otherwise provided for (fire-fighting in ships [A62C 3/10](#))**
- B63B 43/02 . reducing risk of capsizing or sinking ([by means of watertight doors in bulkheads B63B 43/24](#))
- B63B 43/04 . . by improving stability
- B63B 43/045 . . . { [by decreasing the free surface effect of water entered in enclosed decks](#) }
- B63B 43/06 . . . using ballast tanks ([conduits for emptying or ballasting B63B 13/00](#))
- B63B 43/08 . . . by transfer of solid ballast
- B63B 43/085 { [the stabilising effect being provided by the weight of a person placed on an outrigger seat swingable around a vertical axis](#) }
- B63B 43/10 . . by improving buoyancy ({ [amphibious cycles B60F 3/0038](#) })
- B63B 43/12 . . . using inboard air containers { [or inboard floating members](#) }
- B63B 43/14 . . . using outboard floating members
- B63B 43/16 . . . Temporary equipment for stopping leaks, e.g. collision mats
- B63B 43/18 . preventing collision { [or grounding](#) } ; reducing collision damage ({ [reducing pollution by collision B63B 25/082](#) })
- B63B 43/20 . . Feelers
- B63B 43/24 . Arrangements of watertight doors in bulkheads
- B63B 43/26 . . of sliding type

- B63B 43/28 . . . with mechanical drive
- B63B 43/30 . . . with fluid drive
- B63B 43/32 . . of non-sliding type

B63B 45/00 **Arrangement or adaptation 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](#))

WARNING

Not complete, pending a reorganisation; see [B63C 9/21](#)

- B63B 45/02 . the devices being intended to illuminate the way ahead or other areas of environments
- B63B 45/04 . the devices being intended to indicate the vessel or parts thereof
- B63B 45/06 . the devices being intended to illuminate vessels` decks or interior
- B63B 45/08 . the devices being acoustic

B63B 49/00 **Arrangements of nautical instruments or navigational aids** (nautical measuring instruments [G01C](#); radio navigation, analogous arrangements using other waves [G01S](#))

B63B 51/00 **Marking of navigation route**

- B63B 51/02 . with anchored light-ships; by use of lighthouses
- B63B 51/04 . with free-floating flares

B63B 57/00 **Tank { or cargo hold }cleaning specially adapted for vessels** (tank cleaning in general [B08B 9/08](#))

- B63B 57/02 . by washing
- B63B 57/04 . by ventilating

B63B 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](#))

- B63B 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](#))
- B63B 59/04 . Preventing hull fouling (anti-fouling paints [C09D 5/16](#))
- B63B 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](#)) }

- B63B 59/06 . Cleaning devices for hulls
- B63B 59/08 . . of underwater surfaces while afloat ([B63B 59/10](#) takes precedence)
- B63B 59/10 . . using trolleys or the like driven along the surface

B63B 69/00 Equipment for shipping not otherwise provided for

B63B 2001/00 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](#))

- B63B 2001/005 . Deflectors for spray, e.g. for guiding spray generated at the bow of a planing vessel underneath the hull
- B63B 2001/02 . deriving lift mainly from water displacement ([B63B 1/16](#) takes precedence)
- B63B 2001/04 . . with single hull
- B63B 2001/044 . . . with a small waterline area compared to total displacement, e.g. of semi-submersible type
- B63B 2001/045 . . . with means for actively varying hull shape or configuration, e.g. for varying hydrodynamic characteristics
- B63B 2001/06 . . . Shape of fore part
- B63B 2001/066 Substantially vertical stems
- B63B 2001/10 . . with multiple hulls
- B63B 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
- B63B 2001/12 . . . the hulls being interconnected rigidly { ([B63B 1/107](#) takes precedence) }
- B63B 2001/121 { comprising two hulls ([B63B 1/107](#) takes precedence) }
- B63B 2001/123 interconnected by a plurality of beams, or the like members only
- B63B 2001/125 { comprising more than two hulls ([B63B 1/107](#) takes precedence) }
- B63B 2001/126 comprising more than three hulls
- B63B 2001/128 comprising underwater connectors between the hulls
- B63B 2001/14 . . . the hulls being interconnected resiliently { or having means for actively varying hull shape or configuration (collapsible, foldable, inflatable or like vessels [B63B 7/00](#)) }

WARNING

Not complete, pending a reorganisation, see [B63B 1/12](#) and subgroups

- B63B 2001/145 having means for actively varying hull shape or configuration
- B63B 2001/16 . deriving additional lift from hydrodynamic forces
- B63B 2001/18 . . of hydroplane type
- B63B 2001/183 . . . having non-floating planing surfaces, e.g. attached skis or plate-shaped bodies
- B63B 2001/186 . . . Sponsons; Arrangements thereof
- B63B 2001/20 . . . having more than one planing surface ([B63B 1/22](#) takes precedence)

WARNING

Not complete, pending a reorganisation, see [B63B 1/042](#)

- B63B 2001/201 divided by longitudinal chines
- B63B 2001/202 divided by transverse steps
- B63B 2001/203 arranged in semi-catamaran configuration
- B63B 2001/204 arranged on multiple hulls
- B63B 2001/205 the hulls being interconnected rigidly
- B63B 2001/206 comprising two hulls, e.g. catamarans
- B63B 2001/207 comprising more than two hulls
- B63B 2001/208 comprising three hulls, e.g. trimarans
- B63B 2001/209 the hulls being interconnected resiliently, or having means for actively varying hull shape or configuration
- B63B 2001/24 . . of hydrofoil type {([controlling attitude or depth of underwater vessels by hydrofoils or the like B63G 8/18](#))}

WARNING

This group is pending a reorganisation, also documents covered by group [B63B 1/26](#) are within this group

- B63B 2001/28 . . . with movable hydrofoils
- B63B 2001/281 movable about an axis substantially parallel to the flow direction
- B63B 2001/32 . Other means for varying the inherent hydrodynamic characteristics of hulls
- B63B 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
- B63B 2001/327 . . using magneto-hydrodynamic forces
- B63B 2001/34 . . by reducing surface friction
- B63B 2001/345 . . . by ejecting friction reducing solids or liquids, e.g. polymers
- B63B 2001/38 . . . using air bubbles or air layers { [gas filled volumes \(waterborne vessels travelling on air cushions B60V 3/06](#)) }
- B63B 2001/382 by making use of supercavitation, e.g. for underwater vehicles
- B63B 2001/385 using exhaust gas
- B63B 2001/387 using means for producing a film of air or air bubbles over at least a significant portion of the hull surface
- B63B 2003/00** **Constructions of hulls ([non-metallic hulls B63B 5/00](#) ; designing, building, maintaining or repairing methods [B63B 9/00](#))**
- B63B 2003/02 . Hulls assembled from prefabricated sub-units
- B63B 2003/08 . . with detachably-connected sub-units
- B63B 2003/085 . . . Multiple hull vessels, e.g. catamarans, assembled from detachably-connected sub-units
- B63B 2003/14 . Hull parts ([hull armour B63B 3/10](#))

- B63B 2003/145 . . Frameworks, i.e. load bearing assemblies of trusses and girders interconnected at nodal points
- B63B 2003/147 . . Moon-pools, e.g. for offshore drilling vessels
- B63B 2003/26 . . Frames
- B63B 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
- B63B 2003/38 . . Keels ([movable keels B63B 41/00](#))
- B63B 2003/382 . . . adapted for housing energy accumulators, e.g. batteries
- B63B 2003/385 . . . with means for controlling heeling or rolling motions, or lift, e.g. flaps, by changing geometry, or by ballast displacement
- B63B 2003/387 . . . adapted for housing propulsion plant elements
- B63B 2003/42 . . Shaft brackets
- B63B 2003/425 . . . having features not related to structural construction, e.g. hydrodynamic properties or bearings
- B63B 2003/48 . . Decks ([planking B63B 5/06](#))
- B63B 2003/485 . . . movably connected to hull or superstructure

- B63B 2005/00** **Hulls characterised by their construction of non-metallic material**

- B63B 2005/24 . made predominantly of plastics (([surf boards B63B 35/7909](#)))
- B63B 2005/242 . . made of a composite of plastics and other structural materials, e.g. wood or metal
- B63B 2005/245 . . . made of a composite of plastics and metal
- B63B 2005/247 . . . made of a composite of plastics and wood

- B63B 2007/00** **Collapsible, foldable, inflatable or like vessels ([foldable pontoons B63B 35/36](#))**

- B63B 2007/003 . with foldable members
- B63B 2007/006 . comprising nestable elements
- B63B 2007/06 . having parts of non-rigid material
- B63B 2007/065 . . comprising flexible pockets for receiving removable floaters

- B63B 2009/00** **Methods of designing, building, maintaining, converting, refitting, repairing, or determining properties of vessels, not otherwise provided for ([shuttering for building concrete vessels E04G](#))**

- B63B 2009/005 . Methods for dismantling hulls, or elements of ships or other waterborne vessels, e.g. floating offshore structures
- B63B 2009/006 . . for dismantling hulls, or structural elements
- B63B 2009/007 . . for unshipping or dismantling equipment or non-structural elements, e.g. propellers, rudders or prime movers

- B63B 2009/008 . Methods for repairing hulls or structural elements of ships or other waterborne vessels, e.g. floating offshore structures

- B63B 2009/02 . Using towing tanks or model basins for designing (([arrangements in or on ship testing tanks or water tunnels G01M 10/00](#)))

B63B 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

B63B 2009/06 . Methods of building hulls

B63B 2009/065 . . { for floating offshore platforms (grounded platforms [E02B 17/00](#)) }

WARNING

Not complete, see [B63B 21/50](#) , [B63B 35/00 L](#), [B63B 35/44](#)

B63B 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

B63B 2013/00 **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](#))

B63B 2013/005 . Sea chests

B63B 2015/00 **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](#) })

B63B 2015/0008 . Bowsprits

B63B 2015/0016 . Masts characterized by mast configuration or construction

B63B 2015/0025 . . Bipodded masts, e.g. A-type masts

B63B 2015/0033 . . Multipodded masts, e.g. tripod-type

B63B 2015/0041 . . Telescoping masts

B63B 2015/005 . . with means for varying mast position or orientation with respect to the hull

B63B 2015/0058 . . . comprising active mast inclination means

B63B 2015/0066 . . . Inclinal masts with passive righting means, e.g. counterbalancing means

B63B 2015/0075 . . . with mast foot adapted for being moved, e.g. athwartship

B63B 2015/0083 . { Masts for sailing ships or boats }

B63B 2015/0091 . . comprising means for silencing rope noise

B63B 2017/00 **Vessel 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](#) })

WARNING

Not complete pending a reorganisation; for documents concerning protective caps, or anti-theft devices other than using keys, see [B63J 99/00](#)

B63B 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
- B63B 2017/0045 . Caps, hoods, or the like devices for protective purposes, not otherwise provided for
- B63B 2017/0054 . Rests or supports for movable ship-borne equipment
- B63B 2017/0063 . . Boom rests, i.e. props for main sail booms, derricks, or the like
- B63B 2017/0072 . Seaway compensators
- B63B 2017/009 . Wave breakers, breakwaters, splashboards, or the like
- B63B 2017/02 . Awnings { ,including rigid weather protection structures, e.g. sunroofs; Tarpaulins; Accessories for awnings or tarpaulins }
- B63B 2017/026 . . Rigid awnings, or sunroofs
- B63B 2017/04 . Stanchions; Guard-rails; { Bulwarks or the like }
- B63B 2017/045 . . Bulwarks, or the like
- B63B 2019/00 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](#))**
- B63B 2019/0007 . Ship's windows
- B63B 2019/0015 . . Bull's eyes, or the like ship's windows
- B63B 2019/0023 . . . Pivotal bull's eyes with central pivoting axis
- B63B 2019/003 . . . Pivotal bull's eyes with peripheral hinge axis
- B63B 2019/0038 . . Ship's windows, other than bull's eyes
- B63B 2019/0046 . . . Fixed ship's windows, other than bull's eyes
- B63B 2019/0053 . Locking means for ports, doors, windows, covers, or the like, e.g. providing for watertight closure when locked
- B63B 2019/0061 . . comprising pivotally supported threaded locking bolts
- B63B 2019/0069 . . comprising movable positive fit locking members, e.g. swivelling locking clips, or dogs
- B63B 2019/0076 . . . comprising multiple positive fit locking members arranged for simultaneous locking action
- B63B 2019/0084 with mechanical drive for effecting simultaneous locking action
- B63B 2019/0092 . Fly screens, or the like protection devices against insects, e.g. for insertion into bull's eyes openings
- B63B 2019/08 . Ports or like openings in vessels' sides { or at the vessels' bow or stern (forming ramps when open [B63B 27/143](#)) }
- B63B 2019/083 . . Bow ports, e.g. for ferries
- B63B 2019/086 . . Stern ports, e.g. for ferries or Ro-Ro-vessels
- B63B 2019/12 . Hatches; Hatchways (hatch coamings [B63B 3/54](#))
- B63B 2019/14 . . Hatch covers (opening devices in general [E05F](#))

- B63B 2019/145 . . . with means for adjusting size, e.g. width
- B63B 2019/18 . . . slidable
- B63B 2019/185 with sliding bearings
- B63B 2019/24 . . Hatch fastenings, e.g. cleats
- B63B 2019/245 . . . Loose or removable fastening members specially adapted for fastening hatch covers to coamings, sills, or the like

B63B 2021/00

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](#)

- B63B 2021/001 . Mooring bars, yokes, or the like, e.g. comprising articulations on both ends
- B63B 2021/002 . . Yokes, or the like
- B63B 2021/003 . Mooring or anchoring equipment, not otherwise provided for
- B63B 2021/004 . . Quick release elements in mooring connections
- B63B 2021/005 . . Resilient passive elements to be placed in line with mooring or towing chains, or line connections, e.g. dampers or springs
- B63B 2021/006 . . Suction cups, or the like, e.g. for mooring, or for towing or pushing
- B63B 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
- B63B 2021/008 . . Load monitors
- B63B 2021/009 . . Drift monitors
- B63B 2021/20 . 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](#) }

WARNING

Not complete pending a reorganisation, see [B63B 21/00](#)

- B63B 2021/203 . . Mooring cables or ropes, hawsers, or the like; Adaptations thereof
- B63B 2021/206 . . Weights attached to mooring lines or chains, or the like; Arrangements thereof
- B63B 2021/22 . Handling or lashing of anchors
- B63B 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
- B63B 2021/225 . . Marker buoys for indicating position of an anchor, or for providing a line connection between the anchor and the water surface
- B63B 2021/24 . Anchors

- B63B 2021/246 . . comprising elements yielding at a predetermined load, e.g. shear bolts
- B63B 2021/26 . . securing to bed
- B63B 2021/262 . . . by drag embedment
- B63B 2021/265 . . . by gravity embedment, e.g. by dropping a pile-type anchor from a certain height
- B63B 2021/267 . . . by penetration of anchor into the sea bed using water jets, e.g. by ground or sand fluidisation

- B63B 2021/50 . . Anchoring arrangements { or methods } for special vessels, e.g. for floating drilling platforms or dredgers
- B63B 2021/501 . . by means of articulated towers, i.e. slender substantially vertically arranged structures articulated near the sea bed
- B63B 2021/502 . . { by means of tension legs }
- B63B 2021/504 . . . comprising suppressors for vortex induced vibrations
- B63B 2021/505 . . Methods for installation or mooring of floating offshore platforms on site

- B63B 2021/56 . . Towing or pushing equipment (tugs [B63B 35/66](#) ; { towing devices for waterskis or watersledges [B63B 35/815](#) })
- B63B 2021/563 . . Pushing equipment
- B63B 2021/566 . . comprising running ropes or chains, e.g. endless, driven by ground-borne equipment
- B63B 2021/66 . . 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](#))
- B63B 2021/666 . . . for intermittent towing

- B63B 2022/00** **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](#) })

- B63B 2022/006 . . specially adapted for measuring or watch purposes

- B63B 2022/02 . . specially adapted for mooring a vessel
- B63B 2022/028 . . submerged, e.g. fitting into ship-borne counterpart with or without rotatable turret, or being releasably connected to moored vessel

- B63B 2025/00** **Load-accomodating 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](#))

- B63B 2025/02 . . for bulk goods
- B63B 2025/022 . . comprising flexible receptacles for bulk cargo, e.g. bladders for liquid cargo inserted in tanks
- B63B 2025/025 . . Vessels adapted for particular combinations of bulk cargo
- B63B 2025/027 . . . Ore-bulk-oil carriers
- B63B 2025/08 . . fluid ({ constructional features of bunkers [B63B 11/04](#) ; tanks for fuel or the like not forming bunkers [B63B 17/0027](#) })

WARNING

Documents in [B63B 25/08](#) and subgroups concerning bunkers and other tanks for fuel or the like are in the process of being reclassified to [B63B 11/04](#) and [B63B 17/00 F](#)

- [B63B 2025/085](#) . . . comprising separation membranes
- [B63B 2025/087](#) . . . comprising self-contained tanks installed in the ship structure as separate units
- [B63B 2025/24](#) . Means for preventing unwanted cargo movement, e.g. dunnage
- [B63B 2025/245](#) . . of wheeled cargo, e.g. vehicle retainers
- [B63B 2025/28](#) . for deck loads
- [B63B 2025/285](#) . . Means for securing deck containers against unwanted movements

B63B 2027/00

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](#) })

WARNING

The scope of this group is broader than the scope of the corresponding IPC group, and includes the scope of the IPC2 subgroups [B63B 27/02](#) , [B63B 27/06](#) , and [B63B 27/20](#)

- [B63B 2027/02](#) . with intermittent action
- [B63B 2027/14](#) . . Ramps; Gangways or other outboard ladders (inboard ladders [B63B 29/20](#) { ; land-based bridges giving access to ships [E01D 15/24](#) }); { Pilot lifts }
- [B63B 2027/141](#) . . . telescopically extendable
- [B63B 2027/143](#) . . . { Ramps }
- [B63B 2027/145](#) . . . Inflatable ramps
- [B63B 2027/146](#) . . . { Pilot ladders or similar outboard ladders, e.g. bathing ladders; Pilot lifts }
- [B63B 2027/148](#) . . . Pilot lifts
- [B63B 2027/16](#) . . using lifts or hoists (elevators per se [B66B](#)) { Pilot lifts [B63B 27/14](#) }
- [B63B 2027/165](#) . . . Deployment or recovery of underwater vehicles using lifts or hoists

B63B 2029/00

Accommodation for crew or passengers not otherwise provided for

- [B63B 2029/02](#) . Cabins or other living spaces; Construction or arrangement thereof
- [B63B 2029/022](#) . . Bathing platforms
- [B63B 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
- [B63B 2029/04](#) . . Furniture peculiar to vessels (floatable furniture [B63C 9/30](#))
- [B63B 2029/043](#) . . . Seats; Arrangements thereof on vessels
- [B63B 2029/046](#) . . . Tables, e.g. foldable or stowable

- B63B 2029/14 . . Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships
 B63B 2029/145 . . . Collapsible or non-permanent privacy rooms, e.g. closets or changing rooms
- B63B 2035/00** **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](#) })
- [B63B 2035/001](#) . for beach loading or unloading, e.g. landing crafts
- [B63B 2035/002](#) . for inland waters, e.g. for use on canals or rivers
- [B63B 2035/004](#) . Passenger vessels, e.g. cruise vessels or the like
- [B63B 2035/005](#) . Search and rescue (SAR) vessels
- [B63B 2035/006](#) . Unmanned surface vessels, e.g. remotely controlled
- [B63B 2035/007](#) . . autonomously operating
- [B63B 2035/008](#) . . remotely controlled
- [B63B 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
- [B63B 2035/40](#) . for transporting marine vessels {([load accommodation for floating barges and the like B63B 25/006](#))}
- [B63B 2035/405](#) . . for carrying submarines
- [B63B 2035/44](#) . Floating buildings, stores, drilling platforms, or workshops, e.g. carrying water-oil separating devices {([construction methods for floating offshore platforms B63B 9/065](#))}
- WARNING**
- [This group and its subgroups are pending a reorganisation, also documents covered by groups \[B63B 27/30\]\(#\) , \[B63B 27/32\]\(#\) and \[B63B 27/34\]\(#\) are within this group and its subgroups.](#)
- [B63B 2035/442](#) . . Spar-type semi-submersible structures, i.e. shaped as single slender, e.g. substantially cylindrical or trussed vertical bodies
- [B63B 2035/4426](#) . . Stationary floating buildings for human use, e.g. floating dwellings or floating restaurants
- [B63B 2035/4433](#) . . Floating structures carrying electric power plants
- [B63B 2035/444](#) . . . for converting combustion energy into electric energy
- [B63B 2035/4446](#) . . . for converting nuclear energy into electric energy
- [B63B 2035/4453](#) . . . for converting solar energy into electric energy
- [B63B 2035/446](#) . . . for converting wind energy into electric energy
- [B63B 2035/4466](#) . . . for converting water energy into electric energy, e.g. from tidal flows, waves or currents

- B63B 2035/4473 . . Floating structures supporting industrial plants, such as factories, refineries, or the like
- B63B 2035/448 . . Floating hydrocarbon production vessels, e.g. Floating Production Storage and Offloading vessels (FPSO)
- B63B 2035/4486 . . Floating storage vessels, other than vessels for hydrocarbon production and storage, e.g. for liquid cargo
- B63B 2035/4493 . . Floating structures supporting vegetation, such as trees, reeds, crops, plants, or the like, e.g. flexible structures

- B63B 2035/71 . { [Canoes, kayaks or the like](#) ([collapsible, foldable, inflatable or like vessels B63B 7/00](#)) }
- B63B 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

- B63B 2035/73 . Other vessels or like floating structures for pleasure or sport
- B63B 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
- B63B 2035/735 . . Towed structures, the towing member, e.g. tow-rope, being connected to the towed structure
- B63B 2035/737 . . for particular use, not otherwise provided for
- B63B 2035/738 . . . for hunting, or fishing
- B63B 2035/79 . . Surf-boards, e.g. sailboards
- B63B 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
- B63B 2035/7933 . . . { [Emergency arrangements and equipment; Other accessories](#) ([anti-theft devices using locks E05B 73/007](#)) }
- B63B 2035/794 Leashes, i.e. security lines, or tethers connecting a board to the rider, e.g. to a limb; Attachment means therefor
- B63B 2035/7953 . . . { [Winddriven boards](#) }
- B63B 2035/7956 Masts for winddriven boards; Equipment therefor, other than mastfoot arrangements
- B63B 2035/7959 { [Mast foot arrangements](#) }
- B63B 2035/7963 comprising shock absorbing elements
- B63B 2035/7973 { [Sail arrangements](#) }
- B63B 2035/7986 Clew trimmers, i.e. mechanisms or arrangements for trimming or positioning the clew of the sail, or for tensioning the outhaul
- B63B 2035/81 . . Waterskis; Watersledges
- B63B 2035/813 . . . Fins, keels, or the like water guiding means; Arrangements thereof on waterskis
- B63B 2035/818 . . . Wakeboards, i.e. monoboards for users being towed behind a boat, the board comprising bindings oriented substantially perpendicular to the longitudinal axis of the board
- B63B 2035/85 . . Accessories not otherwise provided for, e.g. sticks for water skiing
- B63B 2035/855 . . . Equipment or arrangements for generating waves, particularly adapted for surfing, waterskiing, or the like

- B63B 2039/00** **Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude** { ([for amphibious vehicles B60F 3/0038](#)) }

- B63B 2039/06 . 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](#) })
- B63B 2039/063 . . the foils comprising flexible portions
- B63B 2039/065 . . the foils being pivotal about an axis substantially parallel to the longitudinal axis of the vessel
- B63B 2039/066 . . the lift generating devices using the Magnus effect
- B63B 2039/067 . . effecting motion dampening by means of fixed or movable resistance bodies, e.g. by bilge keels
- B63B 2039/068 . . the foils having a variable cross section, e.g. a variable camber
- B63B 2039/10 . to decrease vessel movements by damping the waves, e.g. by pouring oil on water
- B63B 2039/105 . . by absorption of wave energy, e.g. by structured, wave energy absorbing hull surfaces
- B63B 2041/00** **Drop keels, e.g. centre boards, side boards** { [Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels](#) } ([keels integral with hull B63B 3/38](#) ; [stabilising foils B63B 39/06](#))
- B63B 2041/003 . Collapsible keels, or the like, e.g. telescopically; Longitudinally split hinged keels
- B63B 2041/006 . . Telescopically collapsible keels
- B63B 2043/00** **Improving safety of vessels, e.g. damage control, not otherwise provided for** ([fire-fighting in ships A62C 3/10](#))
- B63B 2043/003 . Arrangements of emergency exits, e.g. for escape from engine rooms
- B63B 2043/006 . Methods or installations specially adapted for detecting ingress of ambient water, e.g. leak detectors
- B63B 2043/02 . reducing risk of capsizing or sinking ([by means of watertight doors in bulkheads B63B 43/24](#))
- B63B 2043/04 . . by improving stability
- B63B 2043/042 . . . using outboard booms supporting ballast, other than solid ballast or persons, e.g. carrying water-filled bags
- B63B 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
- B63B 2043/10 . . by improving buoyancy { ([amphibious cycles B60F 3/0038](#)) }
- B63B 2043/12 . . . using inboard air containers { [or inboard floating members](#) }
- B63B 2043/123 using floaters mounted to the tip of a mast, e.g. inflatable
- B63B 2043/126 pneumatic, e.g. inflatable on demand
- B63B 2043/14 . . . using outboard floating members
- B63B 2043/145 pneumatic, e.g. inflatable on demand
- B63B 2043/18 . preventing collision { [or grounding](#) }; reducing collision damage { ([reducing pollution by collision B63B 25/082](#)) }
- B63B 2043/185 . . using shock absorbing telescoping buffers

- B63B 2045/00** **Arrangement or adaptation 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](#))
- WARNING**
- Not complete, pending a reorganisation; see [B63C 9/21](#)
- [B63B 2045/005](#) . comprising particular electric circuits
- B63B 2057/00** **Tank { or cargo hold }cleaning specially adapted for vessels** (tank cleaning in general [B08B 9/08](#))
- [B63B 2057/005](#) . of ballast tanks, e.g. from deposits, biological organisms; Ship-borne installations therefor
- B63B 2059/00** **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](#))
- [B63B 2059/02](#) . 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](#))
- [B63B 2059/025](#) .. pneumatic, e.g. inflatable
- [B63B 2059/06](#) . Cleaning devices for hulls
- [B63B 2059/065](#) .. mounted on land-borne vehicles, e.g. travelling on the bottom of a dry-dock
- [B63B 2059/08](#) .. of underwater surfaces while afloat ([B63B 59/10](#) takes precedence)
- [B63B 2059/082](#) ... the devices being supported on arms or rods
- [B63B 2059/085](#) ... the devices being adapted for operation by divers
- [B63B 2059/087](#) ... the devices being adapted for being pulled across, or along the underwater surface to be cleaned, e.g. by ropes
- B63B 2201/00** **Signalling devices**
- [B63B 2201/02](#) . Audible
- [B63B 2201/04](#) . Illuminating
- [B63B 2201/06](#) .. by combustion of fluid
- [B63B 2201/08](#) .. Electric light
- [B63B 2201/10](#) . Smoke producing
- [B63B 2201/12](#) . Reflecting means
- [B63B 2201/14](#) . Balloon

B63B 2201/16	. Radio
B63B 2201/18	. Sonar
B63B 2201/20	. Antenna or mast
B63B 2201/22	. Spread-open chemicals or other products
B63B 2201/24	. by means of bubbles
B63B 2201/26	. signalling anomalies, e.g. rupture of connection
B63B 2203/00	Communication means
B63B 2203/02	. telephone
B63B 2205/00	Tether
B63B 2205/02	. Having payout means
B63B 2205/04	. . Having means to control payout
B63B 2205/06	. . Reel for tether
B63B 2205/08	. with means for recovering the sunken object
B63B 2207/00	Buoyancy or ballast means
B63B 2207/02	. Variable ballast or buoyancy
B63B 2207/04	. Pressure equalising or adjusting
B63B 2209/00	Energy supply or activating means
B63B 2209/02	. water activated switches
B63B 2209/04	. water activated batteries
B63B 2209/06	. fluid produced by reaction with water
B63B 2209/08	. impact with water-surface or -bottom
B63B 2209/10	. pyrotechnic means
B63B 2209/12	. with time-delay
B63B 2209/14	. energy generated by movement of the water
B63B 2209/16	. nuclear energy

B63B 2209/18 . solar energy

B63B 2209/20 . wind energy

B63B 2211/00 Applications

B63B 2211/02 . Oceanography

B63B 2211/04 . Diving

B63B 2211/06 . Operation in ice-infested waters

B63B 2213/00 Navigational aids and use thereof, not otherwise provided for in this class

B63B 2213/02 . using satellite radio beacon positioning systems, e.g. the Global Positioning System GPS

B63B 2221/00 Methods and means for joining members or elements

B63B 2221/02 . by welding

B63B 2221/04 . by soldering

B63B 2221/06 . by riveting

B63B 2221/08 . by means of threaded members, e.g. screws, threaded bolts or nuts

B63B 2221/10 . using adhesives

B63B 2221/12 . by means of hook and loop fasteners

B63B 2221/14 . by means of zippers or the like

B63B 2221/16 . by means of ties, ribbons or the like

B63B 2221/18 . by sewing, stitching, stapling or the like methods

B63B 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

B63B 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

B63B 2221/24 . . by means that allow one or more degrees of translational freedom, e.g. telescopic joints, not otherwise provided for in this class

B63B 2231/00 Material used for some parts or elements, or for particular purposes

B63B 2231/02 . Metallic materials

B63B 2231/04	..	Irons, steels or ferrous alloys
B63B 2231/06	...	Stainless steels
B63B 2231/10	..	Aluminium or aluminium alloys
B63B 2231/12	..	Copper or copper alloys
B63B 2231/14	...	Bronze, e.g. nickel-aluminium bronze
B63B 2231/16	...	Brass
B63B 2231/18	..	Titanium or titanium alloys
B63B 2231/20	..	Magnesium or magnesium alloys
B63B 2231/28	..	Shape-memory alloys
B63B 2231/30	.	Magnetic materials
B63B 2231/32	.	Vegetable materials or material comprising predominately vegetable material
B63B 2231/34	..	Wood or wood products
B63B 2231/40	.	Synthetic materials
B63B 2231/42	..	Elastomeric materials
B63B 2231/44	...	Rubber
B63B 2231/46	....	Natural rubber or caoutchouc
B63B 2231/48	....	Synthetic rubber, e.g. silicone rubber, Neoprene, polyurethane
B63B 2231/50	..	Foamed synthetic materials
B63B 2231/52	..	Fibre reinforced plastics materials
B63B 2231/60	.	Concretes
B63B 2231/62	..	Lightweight concretes
B63B 2231/64	..	Reinforced or armoured concretes
B63B 2231/66	...	Fibre reinforced concretes, e.g. synthetic fibre reinforced concretes
B63B 2231/68	..	Prestressed concretes
B63B 2231/70	.	Glass
B63B 2231/72	..	Hollow glass microspheres
B63B 2231/74	.	Bituminous materials or the like
B63B 2231/76	.	Ice
B63B 2241/00		Design characteristics
B63B 2241/02	.	Design characterised by particular shapes
B63B 2241/04	..	by particular cross sections
B63B 2241/06	...	Circular cross sections
B63B 2241/08	...	Polygonal cross sections
B63B 2241/10	..	by particular three dimensional shapes
B63B 2241/12	...	annular or toroidal
B63B 2241/14	...	spherical

- B63B 2241/16 . . . polyhedral
- B63B 2241/20 . Designs or arrangements for particular purposes not otherwise provided for in this class
- B63B 2241/22 . . for providing redundancy to equipment or functionality of a vessel, e.g. for steering
- B63B 2241/24 . . for facilitating transport, e.g. hull shape with limited dimensions
- B63B 2241/26 . . . for transport on roads, e.g. hull shape with maximum dimensions for public roads
- B63B 2241/28 . . . for airborne transport

- B63B 2701/00 Building of the ship`s hull**
- B63B 2701/02 . Steel construction
- B63B 2701/04 . Reinforced concrete construction
- B63B 2701/06 . Wood construction; Composite construction
- B63B 2701/08 . Electric and fusion welding for ships ([welding in general B23K](#))
- B63B 2701/10 . Keelsons, floors, double bottoms, tanks, coal bunkers, tunnels, engine and boiler rooms
- B63B 2701/12 . Frames, web frames, deck beams, longitudinal girders, coamings, deck pillars
- B63B 2701/14 . Deck plating, wooden decks for steel ships
- B63B 2701/16 . Shell plating and bulwarks; Fenders; Gunwales; Bilge keels and other elements fixed to the shell
- B63B 2701/18 . Longitudinal and transverse bulkheads made of steel or wood
- B63B 2701/20 . Stems and keels; Stern frames; Bossings and struts; Propeller guards
- B63B 2701/22 . Lining and panelling in wood or metal; Movable partition walls within accomodation spaces; Insulating walls; Stairs; Windshields on decks ([internal partitions for buildings E04B 2/00](#))

- B63B 2702/00 Submarines**
- B63B 2702/02 . Equipment for lifting sunken submarines ([Equipment for salvaging sunken vessels or other objects B63C 7/00](#))
- B63B 2702/04 . Arrangements of motors and transmissions in submarines; Propulsion
- B63B 2702/06 . Arrangements for the transportation, drydocking, and testing of submarines ([drydocking B63C 1/00](#))
- B63B 2702/08 . Arrangements for anchoring of submarines
- B63B 2702/10 . Miscellaneous arrangement for submarines

B63B 2702/12	<ul style="list-style-type: none"> Submarines of special construction or fitted with special devices or apparatus; Merchant submarines
B63B 2702/14	<ul style="list-style-type: none"> Arrangements for detecting and localising submarines (Acoustic detection G01S , electromagnetic detection G01N)
B63B 2704/00	Port-holes, windows, doors and other openings in the superstructures
B63B 2705/00	Closets, latrines, swimming pools and washing facilities for ships; Overboard discharges
B63B 2707/00	Doors and closing means
B63B 2708/00	Winches; Capstans
B63B 2708/02	<ul style="list-style-type: none"> Winches and capstans driven by electric or electro-hydraulic means
B63B 2709/00	Tables, chairs and other furniture peculiar to vessels
B63B 2710/00	Miscellaneous equipment for ships, e.g. collision mats, rat guards
B63B 2711/00	Equipment for watching and measuring the oscillations, the resistance and the movements of ships; Model towing tanks
B63B 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
B63B 2712/02	<ul style="list-style-type: none"> 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
B63B 2713/00	Stowing of the boats, i.e. arrangement, chocks, lashing down and transport of the boats on deck
B63B 2714/00	Construction of turning davits, davit foundations and davit drives
B63B 2714/02	<ul style="list-style-type: none"> Construction of swinging davits and other davits and of davit foundation and drives
B63B 2715/00	Hydraulic and pneumatic steering gear
B63B 2716/00	Steam-powered steering gear
B63B 2717/00	Hand-operated steering gears; Combined hand and steam-powered steering gears

B63B 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
B63B 2719/00	Arrangements for slowing-down of ships by means of side flaps and for creating a lateral resistance for manoeuvring
B63B 2721/00	Automatic steering apparatus, non-electric
B63B 2721/02	. Auxiliary steering gear and other steering arrangements
B63B 2722/00	Towing in general
B63B 2723/00	Miscellaneous equipment for towing
B63B 2724/00	Navigation signals, e.g. masthead and side lights, marking of seaways, arrangements of compasses
B63B 2725/00	Engine room signals and arrangements for controlling the main engines from the navigation bridge
B63B 2726/00	Miscellaneous signalling devices and draft indicators
B63B 2727/00	Signalling devices using acoustic or mechanical means
B63B 2727/02	. Arrangements for the detection of icebergs, reefs, derelicts, or the like
B63B 2728/00	Lifeboats, liferafts, lifesaving floats, etc.
B63B 2729/00	Coastal lifesaving
B63B 2730/00	Diving suits
B63B 2730/02	. Resilient suits
B63B 2731/00	Arrangements for avoiding capsizing and sinking
B63B 2732/00	Arrangements for avoiding or reducing collision damage
B63B 2733/00	Arrangements for reducing the risk of running aground; Depth sounders
B63B 2734/00	Loading and unloading ships by ship-mounted means

B63B 2735/00	Miscellaneous shipbuilding-related arrangements and constructions, e.g. pontoons
B63B 2736/00	Slipways, shipyard installations and apparatus for launching or hauling-out ships
B63B 2737/00	Dry and floating docks; Cleaning devices for hulls; Drydocking of hull parts; Equipment for dry and floating docks
B63B 2738/00	Re-floating of ships and sunken objects
B63B 2738/02	. Salvaging of ships by means of floats
B63B 2738/04	. Salvaging of ships using cofferdams
B63B 2738/06	. Salvaging of ships using diving bells
B63B 2738/08	. Salvaging of ships by other means, e.g. using balloons or frozen blocks
B63B 2738/10	. Floating docks for lifting ships
B63B 2738/12	. Attaching floats and chains to the hull by mechanical means; Lifting chains
B63B 2739/00	Boats or canoes in general; Construction and outfitting
B63B 2741/00	Manual propulsion; Paddles
B63B 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
B63B 2742/02	. Arrangements on ships for reducing danger due to torpedo or sea mine explosions
B63B 2743/00	Paddle wheels for ships in general
B63B 2744/00	Stern paddle wheels
B63B 2745/00	Propellers for ships in general (construction of air propellers B64C)
B63B 2745/02	. Contra-propellers and other water guiding installations in front of or behind the rotating propeller (rudders with water guiding surfaces B23H 25/00)
B63B 2745/04	. Propulsive devices, e.g. rotating cylinders, paddle wheels; Rudders or stabilising surfaces using Magnus effect
B63B 2746/00	Propellers with air exhaust, e.g. hollow propellers for ships

B63B 2747/00	Arrangements of propellers and other propulsive devices on ships
B63B 2747/02	. Propellers driven by outboard motors placed astern or on the sides of the ship
B63B 2748/00	Propeller hubs and blade connections
B63B 2749/00	Propeller shafts and paddle-wheel shafts; Shaft liners
B63B 2750/00	Propeller shaft bearings, thrust bearings
B63B 2751/00	Propulsion of ships using the reaction effect of a water jet
B63B 2752/00	Propulsion of ships using the reaction effect of steam jets or gas jets
B63B 2753/00	Propulsion of ships using the reaction effect of gas explosions
B63B 2754/00	Propulsive flaps
B63B 2755/00	Electric drives for the propulsive devices
B63B 2756/00	Steam reciprocating engine drives for the propulsive devices
B63B 2757/00	Steam turbine drives for the propulsive devices
B63B 2758/00	Internal combustion engine drives for the propulsive devices
B63B 2759/00	Other means for driving marine propulsion devices; Arrangements for synchronising two or more engines
B63B 2760/00	Marine drive governors that are influenced by the movements of the ship
B63B 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