SECTION B — PERFORMING OPERATIONS; 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) **[2]**

Subclass index

HULLS
Study; general characteristics....9/00, 1/00
General; adjustable keels; protection....3/00, 41/00, 59/00
Particular types....5/00, 7/00
Subdivision; cleaning of tanks....11/00, 57/00
SUPERSTRUCTURES; HULL OR SUPERSTRUCTURE OPENINGS....15/00, 19/00
EMPTYING, BALLASTING; STABILITY; SAFETY....13/00, 29/16, 39/00, 43/00
MOORING, SHIFTING; HANDLING LIFEBOATS....21/00, 23/00
ACCOMMODATION FOR CARGO OR PERSONS....25/00, 27/00, 29/00
ARRANGEMENTS OR ADAPTATIONS OF SIGNALLING OR LIGHTING DEVICES OR OF NAUTICAL INSTRUMENTS....45/00, 49/00
DETAILS AND ACCESSORIES FOR SHIPS....17/00
CONSTRUCTION, MAINTENANCE, CONVERSION, NOT OTHERWISE PROVIDED FOR....9/00
PARTICULAR KINDS OF SHIPS OR FLOATING STRUCTURES NOT OTHERWISE PROVIDED FOR 35/00, 38/00
BUOYS; MARKING NAVIGATION ROUTES....22/00, 51/00

1/00 **Hydrodynamic or hydrostatic features of hulls or of hydrofoils** (hulls peculiar to submarines B63B 3/13; keels B63B 3/38)
1/02 • deriving lift mainly from water displacement (B63B 1/16 takes precedence)
1/04 • • with single hull
1/06 • • • Shape of fore part
1/08 • • • Shape of aft part
1/10 • • with multiple hulls
1/12 • • • the hulls being interconnected rigidly
1/14 • • • the hulls being interconnected resiliently
1/16 • deriving additional lift from hydrodynamic forces
1/18 • • of hydroplane type
1/20 • • • having more than one planing surface (B63B 1/22 takes precedence)
1/22 • • • with adjustable planing surfaces
1/24 • • of hydrofoil type
1/26 • • • having more than one hydrofoil (B63B 1/28 takes precedence)
1/28 • • • with movable hydrofoils
1/30 • • • • retracting or folding
1/32 • Other means for varying the inherent hydrodynamic characteristics of hulls
1/34 • • by reducing surface friction
1/36 • • • using mechanical means
1/38 • • • using air bubbles or air layers
1/40 • • by diminishing wave resistance

3/00 **Constructions of hulls** (non-metallic hulls B63B 5/00)
3/02 • Hulls assembled from prefabricated sub-units
3/04 • • with permanently-connected sub-units
3/06 • • • the sub-units being substantially identical
3/08 • • with detachably-connected sub-units
3/09 • Hulls constructed of non-magnetic metal
3/10 • Armoured hulls
3/12 • Frameless hulls
3/13 • Hulls built to withstand hydrostatic pressure when fully submerged, e.g. submarine hulls
3/14 • Hull parts (hull armour B63B 3/10)
3/16 • • Shells (ports or closures therefor B63B 19/00)
3/18 • • • characterised by being formed predominantly of parts that may be developed into plane surfaces
3/20 • • • of double type
3/22 • • • with corrugations
3/24 • • • Means for diminishing external ridges or protrusions
3/26 • • Frames
3/28 • • • of transverse type; Stringers
3/30 • • • • Bilge knees; Beam knees
3/32 • • • Web frames; Web beams
3/34 • • • of longitudinal type; Bulkhead connections
3/36 • • • Combined frame systems
3/38 • • Keels (movable keels B63B 41/00)
3/40 • • Stern posts; Stern frames
3/42 • • Shaft brackets
3/44 • • Bilge keels (stabilising aspect B63B 39/06)
3/46 • • Stems
3/48 • • Decks (planking B63B 5/06)
3/50 • • • of vaulted type
3/52 • • • Pillars; Deck girders
3/54 • • • Hatch openings
3/56 • • Bulkheads; Bulkhead reinforcements (arrangements of watertight doors B63B 43/24)

3/58 • • • with flat plating
3/60 • • • with curved or corrugated plating
3/62 • • Double bottoms; Tank tops
3/64 • • • Keelsons
3/66 • • Gratings
3/68 • • Panellings; Linings, e.g. for insulating purposes
3/70 • • Reinforcements for carrying localised loads, e.g. propulsion plant, guns

5/00 Hulls characterised by their construction of non-metallic material
5/02 • made predominantly of wood
5/04 • • Carcasses
5/06 • • Decks; Shells
5/08 • • • with single-layer planking
5/10 • • • with multiple-layer planking
5/12 • made predominantly of wood with metal reinforcement, i.e. composite construction
5/14 • made predominantly of concrete, e.g. reinforced
5/16 • • monolithic
5/18 • • built-up from elements
5/20 • • • in combination with elements of other materials
5/22 • • with reinforcing members external to shell
5/24 • made predominantly of plastics

7/00 Collapsible, foldable, inflatable, or like vessels (foldable pontoons B63B 35/36)
7/02 • comprising only rigid parts
7/04 • • sectionalised
7/06 • having parts of non-rigid material
7/08 • • inflatable (inflatable buoys B63B 22/22; inflatable life-rafts B63C 9/04)

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) **[2]**
9/02 • using towing tanks or model basins for designing
9/04 • Rebuilding ships, e.g. increasing tonnage
9/06 • Methods of building hulls **[2]**
9/08 • Determining vessel properties with respect to stability or balance **[2]**

11/00 Interior subdivision of hulls (bulkhead space construction B63B 3/56)
11/02 • Arrangement of bulkheads, e.g. defining cargo spaces
11/04 • Constructional features of bunkers or ballast tanks, e.g. with elastic walls
11/06 • Propeller-shaft tunnels

13/00 Conduits for emptying or ballasting; Self-bailing equipment; Scuppers
13/02 • Ports for passing water through vessels' sides

15/00 Superstructures; Arrangements or adaptations of masts
15/02 • Staying of masts or of other superstructures

17/00 Vessels parts, details, or accessories, not otherwise provided for
17/02 • Awnings
17/04 • Stanchions; Guard-rails
17/06 • Refuse discharge, e.g. for ash

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)
19/02 • Windows specially adapted for ships or other waterborne vessels, e.g. clear-view screens or portholes
19/04 • Air-catching equipment related to windows or port-holes
19/06 • • readily detachable
19/08 • Ports or like openings in vessels' sides (ports for passing water through vessels' sides B63B 13/02)
19/10 • • Coal ports
19/12 • Hatches; Hatchways (hatch coamings B63B 3/54)
19/14 • • Hatch covers
19/16 • • • with detachable boards
19/18 • • • slidable
19/19 • • • foldable **[3]**
19/197 • • • • actuated by fluid pressure **[3]**
19/203 • • • • actuated by cables or the like **[3]**
19/21 • • • of roll-up type **[3]**
19/22 • • Hatch beams
19/24 • • Hatch fastenings, e.g. cleats
19/26 • • Gaskets; Draining means
19/28 • • Other safety devices

21/00 Tying-up; Shifting, towing, or pushing equipment; Anchoring (dynamic anchoring B63H 25/00) **[4]**
21/02 • Magnetic mooring equipment
21/04 • Fastening or guiding equipment for chains, ropes, hawsers, or the like
21/06 • • Bollards
21/08 • • Clamping devices
21/10 • • Fairleads
21/12 • • Rat guards
21/14 • • Hawse-holes; Hawse-pipes; Hawse-hole closures
21/16 • using winches
21/18 • Stoppers for anchor chains
21/20 • Adaptations of chains, ropes, hawsers, or the like, or of parts thereof
21/22 • Handling or lashing anchors
21/24 • Anchors
21/26 • • securing to bed
21/27 • • • by suction **[2]**
21/28 • • • driven-in by explosive charge
21/29 • • • by weight, e.g. flukeless weight anchors **[2]**
21/30 • • rigid when in use **[3]**
21/32 • • • with one fluke
21/34 • • • with two or more flukes
21/36 • • • • foldable
21/38 • • pivoting when in use **[3]**
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 chain **[2]**
21/48 • • Sea-anchors; Drogues
21/50 • Anchoring arrangements for special vessels, e.g. for floating drilling platforms or dredgers
21/54 • Boat-hooks or the like
21/56 • Towing or pushing equipment (tugs B63B 35/66)
21/58 • • Adaptations of hooks for towing; Towing-hook mountings
21/60 • • • Quick releases
21/62 • • characterised by moving of more than one vessel

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) **[2]**

21/66 • • Equipment specially adapted for towing underwater objects or vessels, e.g. fairings for tow-cables **[3]**

22/00 **Buoys** (means for indicating the location of underwater objects B63C 7/26; life-buoys, e.g. rings, B63C 9/08) **[4]**

22/02 • specially adapted for mooring a vessel **[4]**

22/04 • Anchoring arrangements **[4]**

22/06 • • with means to cause the buoy to surface in response to a transmitted signal **[4]**

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 **[4]**

22/10 • • • Water soluble or water weakened means, i.e. buoy released by buoy-to-object securing means being destroyed on contact with water **[4]**

22/12 • • • the surfacing of the buoy being assisted by a gas released or generated on submergence of the buoy **[4]**

22/14 • • • Buoy-to-object securing means responsive to hydrostatic pressure **[4]**

22/16 • specially adapted for marking a navigational route **[4]**

22/18 • having means to control attitude or position, e.g. reaction surfaces or tether **[4]**

22/20 • • Ballast means **[4]**

22/22 • Inflatable buoys with gas generating means (B63B 22/12 takes precedence) **[4]**

22/24 • container type, i.e. having provision for the storage of material **[4]**

22/26 • • having means to selectively release contents, e.g. swivel couplings **[4]**

22/28 • • submerged when not in use **[4]**

23/00 **Equipment for handling lifeboats or the like**

23/02 • Davits, i.e. devices having arms for lowering boats by cables or the like

23/04 • • with arms pivoting on substantially-horizontal axes, e.g. gravity type

23/06 • • • with actual pivots

23/08 • • • • the arms being articulated

23/10 • • • • with positive drive of the arms

23/12 • • • with simulated pivots

23/14 • • • • using linkages

23/16 • • • • using guide tracks

23/18 • • with arms pivoting on substantially-vertical axes

23/20 • • • Davits with single arms

23/22 • • • • Slings or the like therefor

23/24 • • • Slewing equipment therefor

23/26 • • with rectilinear translation of boat before lowering

23/28 • Devices for projecting or releasing boats for free fall

23/30 • Devices for guiding boats to water surface

23/32 • • Rigid guides, e.g. having arms pivoted near waterline

23/34 • • Guiding means for lowering by cables, e.g. for listing ships

23/36 • • • Skid fenders

23/38 • Transport of boats to davits or the like

23/40 • Use of lowering or hoisting gear

23/42 • • with braking equipment

23/44 • • • on the ship

23/46 • • • in the boat

23/48 • • using winches for boat handling

23/50 • • • with tensioning gear

23/52 • • • with control of winches from boat

23/54 • • with trimming equipment

23/56 • • • controlled from boat

23/58 • • with tackle-engaging or release gear

23/60 • • Additional connections between boat and davit

23/62 • Fastening or storing of boats on deck

23/64 • • Lashings; Covers

23/66 • • Blocks; Chocks

23/68 • • • for stacking boats

23/70 • Condition-responsive handling equipment, e.g. automatic release of boat from lowering tackle upon contact with water **[4]**

25/00 **Load-accommodating arrangements, e.g. stowing or trimming; Vessels characterised thereby** (fishing vessel fish holds B63B 35/24; trimming otherwise than by cargo division. e.g. by use of ballast, B63B 43/06, B63B 43/08)

25/02 • for bulk goods

25/04 • • solid

25/06 • • • for cereals

25/08 • • fluid

25/10 • • • open to ambient air

25/12 • • • closed

25/14 • • • • pressurised

25/16 • • • • heat-insulated

25/18 • Detachable decks

25/20 • • for motor vehicles or the like

25/22 • for palletised articles

25/24 • Means for preventing unwanted cargo movement, e.g. dunnage

25/26 • for frozen goods

25/28 • for deck loads

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) **[3]**

Note(s)

Groups B63B 27/30-B63B 27/36 take precedence over groups B63B 27/04-B63B 27/28.

27/04 • of derricks **[3]**

27/08 • of winches **[3]**

27/10 • of cranes **[3]**

27/12 • • of gantry type **[3]**

27/14 • of ramps, gangways or outboard ladders **[3]**

27/16 • of lifts or hoists **[3]**

27/18 • of cableways, e.g. with breeches-buoys **[3]**

27/22 • of conveyors, e.g. of endless-belt or screw-type **[3, 6]**

27/24 • of pipe-lines **[3]**

27/25 • • for fluidised bulk material **[3]**

27/26 • of devices with throwing action **[3]**

27/28 • of chutes **[3]**

27/30 • for transfer at sea between ships or between ships and off-shore structures **[3]**

27/32 • • using cableways **[3]**

27/34 • • using pipe-lines **[3]**

27/36 • for floating cargo **[3]**

29/00 **Accommodation for crew or passengers not otherwise provided for**

29/02 • Cabins or other living spaces; Construction or arrangement thereof
29/04 • • Furniture specially adapted for vessels
29/06 • • • Fastening to floors
29/08 • • • Storm guards on tables, e.g. fiddles
29/10 • • • Berths; Mounting ladders therefor
29/12 • • • Self-levelling mountings
29/14 • • Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships
29/16 • Soil-water discharges
29/18 • Arrangements or adaptations of swimming pools
29/20 • Arrangements or adaptations of ladders (mounting ladders for berths B63B 29/10)
29/22 • Galleys **[2]**

35/00 Vessels or like floating structures adapted for special purposes (vessels characterised by load-accommodating arrangements B63B 25/00; mine-laying or mine-sweeping vessels, submarines, aircraft carriers or other vessels characterised by their offensive or defensive arrangements B63G) **[5]**
35/03 • Pipe-laying vessels **[5]**
35/04 • Cable-laying vessels **[5]**
35/06 • • for moving cable-ends from ship to shore **[5]**
35/08 • Ice-breakers **[5]**
35/10 • • having forced pitching or rolling equipment **[5]**
35/12 • • having ice-cutters **[5]**
35/14 • Fishing vessels **[5]**
35/16 • • Trawlers **[5]**
35/18 • • • adapted to dragging nets aboard **[5]**
35/20 • • • adapted to hoisting nets aboard **[5]**
35/22 • • Whale catchers; Whale factory vessels **[5]**
35/24 • • Fish holds **[5]**
35/26 • • • for live fish **[5]**
35/28 • Barges or lighters **[5]**
35/30 • • self-discharging **[5]**
35/32 • for collecting pollution from open water **[5]**

Note(s)

If the apparatus for collecting pollution from open water is of interest apart from ship construction aspects, it is also classified in group E02B 15/00.

35/34 • Pontoons **[5]**
35/36 • • foldable **[5]**
35/38 • • Rigidly-interconnected pontoons **[5]**
35/40 • for transporting marine vessels **[5]**
35/42 • • with adjustable draught **[5]**
35/44 • Floating buildings, stores, drilling platforms, or workshops, e.g. carrying water-oil separating devices **[5]**
35/50 • Vessels or floating structures for aircraft (aircraft carriers B63G 11/00) **[5]**
35/52 • • Nets, slipways or the like, for recovering aircraft from the water **[5]**
35/53 • • Floating runways **[3, 5]**
35/54 • Ferries **[5]**
35/56 • Lightships (marking of navigational route with anchored lightships B63B 51/02) **[5]**
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 (life-rafts or the like B63C 9/02) **[4, 5]**
35/607 • • having a platform or floor below the level of the buoyancy means, e.g. suspended basket type **[4, 5]**
35/613 • • with tubular shaped flotation members **[4, 5]**
35/62 • • formed from logs or the like **[4, 5]**
35/66 • Tugs **[5]**
35/68 • • for towing **[5]**
35/70 • • for pushing **[5]**
35/71 • Canoes, kayaks or the like **[4, 5]**
35/73 • Other vessels or like floating structures for pleasure or sport **[5]**
35/74 • • Body supporting buoyant devices with seat **[4, 5]**
35/76 • • • Ring-shaped buoyant members (ring-shaped life-buoys B63C 9/08) **[4, 5]**
35/78 • • • U-shaped buoyant members **[4, 5]**
35/79 • • Surf-boards, e.g. sailboards **[5]**
35/81 • • Water skis; Water sledges **[5]**
35/83 • • Water shoes; Bog shoes **[5]**
35/85 • • Accessories not otherwise provided for, e.g. sticks for water skiing **[5]**

38/00 Vessels or like floating structures not otherwise provided for [5]

39/00 Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude
39/02 • to decrease vessel movements by displacement of masses **[2]**
39/03 • • by transferring liquids **[2]**
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)
39/08 • to decrease vessel movements by using auxiliary jets or propellers (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 **[2]**
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

43/00 Improving safety of vessels, e.g. damage control, not otherwise provided for
43/02 • reducing risk of capsizing or sinking (by means of watertight doors in bulkheads B63B 43/24)
43/04 • • by improving stability
43/06 • • • using ballast tanks
43/08 • • • by transfer of solid ballast
43/10 • • by improving buoyancy
43/12 • • • using inboard air containers
43/14 • • • using outboard floating members
43/16 • • • Temporary equipment for stopping leaks, e.g. collision mats
43/18 • preventing collision; reducing collision damage
43/20 • • Feelers
43/24 • Arrangements of watertight doors in bulkheads
43/26 • • of sliding type
43/28 • • • with mechanical drive
43/30 • • • with fluid drive
43/32 • • of non-sliding type

45/00 Arrangements or adaptations of signalling or lighting devices (life-buoys, life-belts, life-jackets, life-suits or the like, characterised by signalling means B63C 9/20) **[4]**
45/02 • the devices being intended to illuminate the way ahead or other areas of environments

45/04 • the devices being intended to indicate the vessel or parts thereof
45/06 • the devices being intended to illuminate vessels' decks or interior
45/08 • the devices being acoustic

49/00 Arrangements of nautical instruments or navigational aids

51/00 Marking of navigational routes otherwise than with buoys [4]
51/02 • with anchored lightships; by use of lighthouses **[4]**
51/04 • with free-floating flares

57/00 Tank cleaning specially adapted for vessels
57/02 • by washing
57/04 • by ventilating

59/00 Hull protection specially adapted for vessels; Cleaning devices specially adapted for vessels
59/02 • Fenders integral with waterborne vessels or specially adapted therefor; Rubbing-strakes (skid fenders for lifeboats B63B 23/36)
59/04 • Preventing hull fouling **[3]**
59/06 • Cleaning devices for hulls **[3]**
59/08 • • of underwater surfaces while afloat (B63B 59/10 takes precedence) **[3]**
59/10 • • using trolleys or the like driven along the surface **[3]**

69/00 Equipment for shipping not otherwise provided for [2013.01]