

65 Ship building and nautical engineering

(65a	Ship building, outfitting and equipment)
65a1	Ships, according to form, construction and use
65a2	Outfitting and equipment of ships
65a	(IPC: B63B) Ships or other waterborne vessels; Equipment for shipping
65b	Dry-docking and launching of ships, underwater work, diving, salvage, rescue
65b	(IPC: B63C) Launching, hauling-out, or dry-docking of vessels; Life-saving in water; Equipment for dwelling or working under water; Means for salvaging or searching for underwater objects
65c	Boats and other craft, inclusive of those with manual and pedal drive
65d	Torpedoes
65e	Naval mines
(65f	Ship propulsion, shipboard machinery, propellers)
65f1	Ship propulsion
65f2	Shipboard machinery
65f3	Propellers
65g	(IPC: B63G) Offensive or defensive arrangements on vessels; Mine-laying; Mine-sweeping; Submarines; Aircraft carriers
65h	(IPC: B63H) Marine propulsion or steering
65j	(IPC: B63J) Auxiliaries on vessels

65a1	Ships, according to form, construction and use
	Special kinds of ships and floating bodies
65a1-1	Freighters, ferries and others
65a1-2	Fishing vessels (equipment for fish processing 65a2-39)
65a1-3	Icebreakers
65a1-4	Submarines (design 65a1-15 – 65a1-20, fitting 65a2; salvage equipment, devices for detecting submarines 65b-18; lifesaving equipment 65b-25)
65a1-5	Floating harbours, workshops, stores, batteries
65a1-6	Floating platforms for aircraft, aircraft transports, accommodation and transfer onto ships (aircraft docks 65b-3)
65a1-7	Scows, also self-unloading, lighters, river barges
65a1-8	Other vessels and floating bodies, pontoons, also for floating bridges (ship bridges 19d-6/05, 19d-15/14), fish tanks, etc.
65a1-9	Amphibious vehicles
	Hull forms
65a1-10	Ship forms, considering resistance, stability and construction in general
65a1-10/01	Methods and instruments for measuring ship resistance
65a1-11	Gliding ships and boats

- 65a1-12 Reduction of outer friction resistance
- 65a1-13 Special hull forms; several floating bodies, roller floats etc. (drum floats as propellers 65f3-4)

Hull structures

- 65a1-14 Wooden, composite and reinforced concrete ships
- 65a1-15 Iron ships, structure systems, joints, especially welded joints, submarine hull structures
- 65a1-16 Individual structural components, such as stems and stern posts, planking, hold arrangements
- 65a1-17 Planking and insulation for ships holds
- 65a1-18 Special work processes in ship building
- 65a1-19 Preservation of ship hulls, also prevention of marine fouling and the cleaning of outer skin
- 65a1-20 Hull structures for protection against external injuries, e.g. armour, screen bulkheads, division into compartments, etc.

65a2 Outfitting and equipment of ships

Devices for anchoring and mooring

- 65a2-1 Anchor devices and anchor tackle
- 65a2-2 Ships' anchors
- 65a2-3 Mooring devices
- 65a2-4 Drag anchors (grapnels and sweeping hooks 65b-19)

Steering devices (powered devices for steering gear 65f2, manual steering devices for boats 65c-9)

- 65a2-5 Rudders, according to form, structure and arrangement
- 65a2-6 Steering connections between the rudder and the steering engine or handwheel in case of manual power
- 65a2-7 Steering by means of propellers or jet propulsion
- 65a2-8 Brake devices
- 65a2-9 Submarine depth controls
- 65a2-10 Other means for steering

Boat handling devices on ships

- 65a2-11 Rotary davits
- 65a2-12 Hinged davits
- 65a2-13 Gravity davits
- 65a2-14 Boat cranes
- 65a2-15 Other boat lowering devices
- 65a2-16 Devices for ensuring the launching of boats from an oblique position of the ship
- 65a2-17 Rigging of davits: suspension, rope guides, boat cables
- 65a2-18 Arrangement of davits and winches (winches 35c)
- 65a2-19 Storage and transport of boats to the launching area
- 65a2-20 Devices for releasing boats from their suspensions

Masts and rigging

- 65a2-21 Mast and spars
- 65a2-22 Sails: design and arrangement
- 65a2-23 Rigging
- 65a2-24 Rope fastening and guiding of ropes: bollards, cleats, blocks, stoppers
- 65a2-25 Sea ladders and gangplanks

Onboard loading and unloading equipment, and stowing of cargo (off-board equipment for loading and unloading ships 81e)

- 65a2-26 Cargo booms, cranes

- 65a2-27 Elevators and belt conveyors
- 65a2-28 Pneumatic or hydraulic conveying equipment
- 65a2-29 Stowing and trimming cargo in general, including bulk cargo
- 65a2-30 Transfer and storage of liquid cargo, including oil storage in submarines
- 65a2-31 Coaling equipment
- 65a2-32 Other loading and unloading equipment (self-unloading scows 65a1-7)
- 65a2-33 Cargo hatches

Equipment for the internal operation of ships

- 65a2-34 Windows
- 65a2-35 Doors, portholes, covers, skylights
- 65a2-36 Closing devices for watertight doors
- 65a2-37 Stairs and gangways (sea ladders and gangplanks 65a2-25)
- 65a2-38 Heating and ventilation, including air supply to boiler and engine rooms (artificial draft 65f2-3, general 24i)
- 65a2-39 Ships' cooling and refrigeration installations, only insofar as the construction and structure of such installations is substantially modified by being mounted aboard ships (53c-3/01)
- 65a2-40 Fire extinguishing equipment (fire fighting ships 61a)
- 65a2-41 Devices for indicating fire, smoke and gas
- 65a2-42 Pumping and flooding devices, also bilge oil removal (bilge pumps 59b, pump arrangements 65f2-10)
- 65a2-43 Devices for indicating water in the ship, sounding devices
- 65a2-44 Diving equipment in submarines
- 65a2-45 Washing and bathing equipment, heads
- 65a2-46 Artillery, torpedo and mine equipment, also in submarines (guns 72c, ammunition conveying 72d, torpedo-launching and mine-laying devices 65d, 65e)

Furnishing and outfitting of living quarters

- 65a2-47 Lighting
- 65a2-48 Ship tables
- 65a2-49 Ship beds
- 65a2-50 Ship chairs
- 65a2-51 Other ship furniture
- 65a2-52 Special equipment for steadying objects

Equipment for controlling ship stability and motion (stability and list gauges 42c-25)

- 65a2-53 Side floats and outriggers
- 65a2-54 Wave control
- Damping ship vibrations
 - 65a2-55 by means of gyrostabilisers
 - 65a2-56 by means of protruding hydrofoils, bilge keels
 - 65a2-57 by means of water inside the ship
 - 65a2-58 by means of shifting weights
 - 65a2-59 by other means

Buoyancy equipment

- 65a2-60 Maintaining buoyancy by prevention of capsizing and sinking
- 65a2-61 Ship fenders
- 65a2-62 Bumper equipment
- 65a2-63 Damage control
- 65a2-64 Special buoyancy equipment in submarines, such as drop weights
- 65a2-65 Devices to indicate and measure stability (inclinometers for ships (42c-25/01))

Ship operation and navigation apparatus (sounders for unlimited depths 42c-28 – 42c-31)

- 65a2-66 Depth indicators
- 65a2-67 Grounding prevention, prevention of collisions and contact with other floating bodies by mechanical means (ship brakes 65a2-8)
- 65a2-68 Navigation by optical means (design of optical means 74d); telescope arrangements (periscopes 42h-10/02; nautical instruments 42c-41; means of instruction for navigation 42n-6/09)
- 65a2-69 Navigation by acoustic means (construction of acoustic means 74d)
- 65a2-70 Navigation by electrical means (electrical part 21a, 21e, 21g)
- 65a2-71 Buoys and sea marks (construction of signalling equipment 74d)
- 65a2-72 Ship equipment for fog dispersal (62c-20/02, 45f-10; 45f-15/00; 72g-7/04)
- 65a2-73 Reducing the visibility of ships (45k-4/50; 45k-13/00; 62c-20/02; 72g-7/04; chemical part 78d-1/02)
- 65a2-74 Equipment against sinking, nets, etc. in submarines

65a (IPC: B63B) Ships or other waterborne vessels; Equipment for shipping (air-cushion vehicles 62b-60)**65a-1/00 Hydrodynamic or hydrostatic features of hulls or of hydrofoils** (hulls peculiar to submarines 65a-3/13; keels 65a-3/38; determining hydrodynamic or hydrostatic features 65a-9/00)

- 65a-1/02 . deriving lift mainly from water displacement (65a-1/16 takes precedence)
- 65a-1/04 . . with single hull
- 65a-1/06 . . . Shape of fore part
- 65a-1/08 . . . Shape of aft part
- 65a-1/10 . . with multiple hulls
- 65a-1/12 . . . the hulls being interconnected rigidly
- 65a-1/14 . . . the hulls being interconnected resiliently
- 65a-1/16 . deriving additional lift from hydrodynamic forces
- 65a-1/18 . . of hydroplane type
- 65a-1/20 . . . having more than one planing surface (65a-1/22 takes precedence)
- 65a-1/22 . . . with adjustable planing surfaces
- 65a-1/24 . . of hydrofoil type
- 65a-1/26 . . . having more than one hydrofoil (65a-1/28 takes precedence)
- 65a-1/28 . . . with movable hydrofoils
- 65a-1/30 retracting or folding
- 65a-1/32 . Other means for varying the inherent hydrodynamic characteristics of hulls
- 65a-1/34 . . by reducing surface friction
- 65a-1/36 . . . using mechanical means
- 65a-1/38 . . . using air bubbles or air layers
- 65a-1/40 . . by diminishing wave resistance

65a-3/00 Constructions of hulls (non-metallic hulls 65a-5/00; designing, building, maintaining, or repairing methods 65a-9/00)

- 65a-3/02 . Hulls assembled from prefabricated sub-units
- 65a-3/04 . . with permanently-connected sub-units
- 65a-3/06 . . . the sub-units being substantially identical
- 65a-3/08 . . with detachably-connected sub-units
- 65a-3/09 . Hulls constructed of non-magnetic metal
- 65a-3/10 . Armoured hulls
- 65a-3/12 . Frameless hulls
- 65a-3/13 . Hulls built to withstand hydrostatic pressure when fully submerged, e.g. submarine hulls
- 65a-3/14 . Hull parts (hull armour 65a-3/10)
- 65a-3/16 . . Shells (ports or closures therefor 65a-19/00)
- 65a-3/18 . . . characterised by being formed predominantly of parts that may be developed into plane surfaces
- 65a-3/20 . . . of double type

65a-3/22	. . . with corrugations
65a-3/24	. . . Means for diminishing external ridges or protrusions
65a-3/26	. . Frames
65a-3/28	. . . of transverse type; Stringers
65a-3/30	. . . . Bilge knees; Beam knees
65a-3/32	. . . Web frames; Web beams
65a-3/34	. . . of longitudinal type; Bulkhead connections
65a-3/36	. . . Combined frame systems
65a-3/38	. . Keels (movable keels 65a-41/00)
65a-3/40	. . Stern posts; Stern frames
65a-3/42	. . Shaft brackets
65a-3/44	. . Bilge keels (stabilising aspect 39/06)
65a-3/46	. . Stems
65a-3/48	. . Decks (planking 65a-5/06)
65a-3/50	. . . of vaulted type
65a-3/52	. . . Pillars; Deck girders
65a-3/54	. . . Hatch openings
65a-3/56	. . Bulkheads; Bulkhead reinforcements (arrangements of watertight doors 65a-43/24)
65a-3/58	. . . with flat plating
65a-3/60	. . . with curved or corrugated plating
65a-3/62	. . Double bottoms; Tank tops
65a-3/64	. . . Keelsons
65a-3/66	. . Gratings
65a-3/68	. . Panellings; Linings, e.g. for insulating purposes
65a-3/70	. . Reinforcements for carrying localised loads, e.g. propulsion plant, guns
65a-5/00	Hulls characterised by their construction of non-metallic material
65a-5/02	. made predominantly of wood
65a-5/04	. . Carcasses
65a-5/06	. . Decks; Shells
65a-5/08	. . . with single-layer planking
65a-5/10	. . . with multiple-layer planking
65a-5/12	. made predominantly of wood with metal reinforcement, i.e. composite construction
65a-5/14	. made predominantly of concrete, e.g. reinforced
65a-5/16	. . monolithic
65a-5/18	. . built-up from elements
65a-5/20	. . . in combination with elements of other materials
65a-5/22	. . with reinforcing members external to shell
65a-5/24	. made predominantly of plastics
65a-7/00	Collapsible, foldable, inflatable, or like vessels (foldable pontoons 65a-35/36)
65a-7/02	. comprising only rigid parts
65a-7/04	. . sectionalised
65a-7/06	. having parts of non-rigid material
65a-7/08	. . inflatable
65a-9/00	Methods of designing, building, maintaining, converting, refitting, or repairing of vessels, not otherwise provided for (shuttering for building concrete vessels 37e)
65a-9/02	. Using towing tanks or model basins for designing
65a-9/04	. Rebuilding ships, e.g. increasing tonnage
65a-11/00	Interior subdivision of hulls (bulkhead space construction 65a-3/56)
65a-11/02	. Arrangement of bulkheads, e.g. defining cargo spaces
65a-11/04	. Constructional features of bunkers or ballast tanks, e.g. with elastic walls (cleaning of tanks 65a-57/00)
65a-11/06	. Propeller-shaft tunnels

65a-13/00	Conduits for emptying or ballasting; Self-bailing equipment; Scuppers (draining means for hatches 65a-19/26; centrifugal bilge-water separators 85b; pipes in general 47f1)
65a-13/02	. Ports for passing water through vessels' sides
65a-15/00	Superstructures; Arrangements or adaptations of masts (loading or unloading equipment 65a-27/00; sails, running rigging 65h)
65a-15/02	. Staying of masts or of other superstructures
65a-17/00	Vessels parts, details, or accessories, not otherwise provided for
65a-17/02	. Awnings
65a-17/04	. Stanchions; Guard-rails
65a-17/06	. Refuse discharge, e.g. for ash (removal of domestic or like refuse 81d)
65a-19/00	Arrangements or adaptations of ports, doors, windows, port-holes, or other openings or covers (scuppers 65a-13/00; arrangements of watertight doors in bulkheads 65a-43/24)
65a-19/02	. Clear-view screens
65a-19/04	. Air-catching equipment related to windows or port-holes (ventilation 65j-2/00)
65a-19/06	. . readily detachable
65a-19/08	. Ports or like openings in vessels' sides
65a-19/10	. . Coal ports
65a-19/12	. Hatches; Hatchways (hatch coamings 65a-3/54)
65a-19/14	. . Hatch covers (opening devices in general 68d)
65a-19/16	. . . with detachable boards
65a-19/18	. . . . slidable
65a-19/20	. . . . foldable; of roll-up type
65a-19/22	. . Hatch beams
65a-19/24	. . Hatch fastenings, e.g. cleats
65a-19/26	. . Gaskets; Draining means
65a-19/28	. . Other safety devices
65a-21/00	Tying-up; Shifting, towing, or pushing equipment; Anchoring; Buoys (equipment for shipping in harbours 84a)
65a-21/02	. Magnetic mooring equipment
65a-21/04	. Fastening or guiding equipment for chains, ropes, hawsers, or the like
65a-21/06	. . Bollards (bollards in general 84a)
65a-21/08	. . Clamping devices (in general 47a1)
65a-21/10	. . Fairleads
65a-21/12	. . Rat guards
65a-21/14	. . Hawse-holes; Hawse-pipes; Hawse-hole closures
65a-21/16	. Using winches (winches per se 35c)
65a-21/18	. Stoppers for anchor chains
65a-21/20	. Adaptations of chains, or parts thereof (chains, in general 47d)
65a-21/22	. Handling or lashing anchors
65a-21/24	. Anchors
65a-21/26	. . securing to bed
65a-21/28	. . . driven-in by explosive charge
65a-21/30	. . rigid when in use (65a-21/28 takes precedence)
65a-21/32	. . . with one fluke
65a-21/34	. . . with two or more flukes
65a-21/36	. . . . foldable
65a-21/38	. . pivoting when in use (65a-21/28 takes precedence)
65a-21/40	. . . with one fluke
65a-21/42	. . . . of ploughshare type
65a-21/44	. . . with two or more flukes
65a-21/46	. . with sliding connection to chain
65a-21/48	. . Sea-anchors; Drogues
65a-21/50	. Anchoring arrangements for special vessels, e.g. for floating drilling platforms
65a-21/52	. Buoys (adaptations or arrangements for marking navigational routes 65a-51/02); Anchoring arrangements therefor

- 65a-21/54 . Boat-hooks or the like
- 65a-21/56 . Towing or pushing equipment (tugs 65a-35/66)
- 65a-21/58 . . Adaptations of hooks for towing; Towing-hook mountings (hooks in general 47a1)
- 65a-21/60 . . . Quick releases
- 65a-21/62 . . characterised by moving of more than one vessel (rigid interconnections between pontoons 65a-35/38)

65a-23/00 Equipment for handling lifeboats or the like

- 65a-23/02 . Davits, i.e. devices having arms for lowering boats by cables or the like
- 65a-23/04 . . with arms pivoting on substantially-horizontal axes, e.g. gravity type
- 65a-23/06 . . . with actual pivots
- 65a-23/08 the arms being articulated
- 65a-23/10 with positive drive of the arms
- 65a-23/12 . . . with simulated pivots
- 65a-23/14 using linkages
- 65a-23/16 using guide tracks
- 65a-23/18 . . with arms pivoting on substantially-vertical axes
- 65a-23/20 . . . Davits with single arms (cranes in general 35b)
- 65a-23/22 Slings or the like therefor
- 65a-23/24 . . . Slewing equipment therefor
- 65a-23/26 . . with rectilinear translation of boat before lowering
- 65a-23/28 . Devices for projecting or releasing boats for free fall
- 65a-23/30 . Devices for guiding boats to water surface
- 65a-23/32 . . Rigid guides, e.g. having arms pivoted near waterline
- 65a-23/34 . . Guiding means for lowering by cables, e.g. for listing ships
- 65a-23/36 . . . Skid fenders
- 65a-23/38 . Transport of boats to davits or the like
- 65a-23/40 . Use of lowering or hoisting gear
- 65a-23/42 . . with braking equipment
- 65a-23/44 . . . on the ship
- 65a-23/46 . . . in the boat
- 65a-23/48 . . Using winches for boat handling (winches per se 35c)
- 65a-23/50 . . . with tensioning gear
- 65a-23/52 . . . with control of winches from boat
- 65a-23/54 . . with trimming equipment
- 65a-23/56 . . . controlled from boat
- 65a-23/58 . . with tackle-engaging or release gear
- 65a-23/60 . . Additional connections between boat and davit
- 65a-23/62 . Fastening or storing of boats on deck
- 65a-23/64 . . Lashings; Covers
- 65a-23/66 . . Blocks; Chocks
- 65a-23/68 . . . for stacking boats

65a-25/00 Load-accommodating arrangements, e.g. stowing, trimming; Vessels characterised thereby (constructive aspects of cargo-spaces 65a-11/00; hatches, hatchways 65a-19/12; trimming otherwise than by cargo division e.g. by use of ballast, 65a-43/06, 65a-43/08)

- 65a-25/02 . for bulk goods
- 65a-25/04 . . solid
- 65a-25/06 . . . for cereals
- 65a-25/08 . . fluid
- 65a-25/10 . . . open to ambient air
- 65a-25/12 . . . closed
- 65a-25/14 pressurised
- 65a-25/16 heat-insulated (insulating panellings 65a-3/68; heating or cooling 65j-2/00)
- 65a-25/18 . Detachable decks
- 65a-25/20 . . for motor vehicles or the like
- 65a-25/22 . for palletised articles
- 65a-25/24 . Means for preventing unwanted cargo movement, e.g. dunnage
- 65a-25/26 . for frozen goods
- 65a-25/28 . for deck loads

65a-27/00	Loading or unloading cargo or passengers (self-discharging barges or lighters 65a-35/30; shore-based 81e)
65a-27/02	. with intermittent action
65a-27/04	. . Ships' derricks, i.e. employing ships' masts (derricks in general 35b)
65a-27/06	. . . with slewing force exerted at pivoted end
65a-27/08	. . using winches (winches per se 35c)
65a-27/10	. . using cranes (cranes per se 35b)
65a-27/12	. . . of gantry type
65a-27/14	. . Ramps, gangways or other outboard ladders (inboard ladders 65a-29/20)
65a-27/16	. . using lifts or hoists (elevators per se 35a)
65a-27/18	. . using cableways, e.g. with breeches-buoys (cableways per se 20a)
65a-27/20	. with continuous action
65a-27/22	. . using endless-band or like conveyers (conveyers per se 81e)
65a-27/24	. . Loading or unloading fluids
65a-27/26	. . using devices with throwing action (devices with throwing action per se 81e)
65a-27/28	. . using chutes (chutes per se 81e)
65a-29/00	Accommodation for crew or passengers not otherwise provided for
65a-29/02	. Cabins or other living spaces; Construction or arrangement thereof
65a-29/04	. . Furniture peculiar to vessels (floatable furniture 65b)
65a-29/06	. . . Fastening to floors
65a-29/08	. . . Storm guards on tables, e.g. fiddles
65a-29/10	. . . Berths; Mounting ladders therefor
65a-29/12	. . . Self-levelling mountings
65a-29/14	. . Closet or like flushing arrangements; Washing or bathing facilities peculiar to ships
65a-29/16	. Soil-water discharges
65a-29/18	. Arrangements or adaptations of swimming pools
65a-29/20	. Arrangements or adaptations of ladders (mounting ladders for berths 65a-29/10)
65a-35/00	Vessels or like floating structures not otherwise provided for (vessels characterised by load-accommodating arrangements 65a-25/00; submarines, mine-layers, or mine-sweepers 65g; buoyant containers 65b)
65a-35/02	. adapted for special purposes
65a-35/04	. . Cable-laying vessels
65a-35/06	. . . for moving cable-ends from ship to shore
65a-35/08	. . Ice-breakers
65a-35/10	. . . having forced pitching or rolling equipment
65a-35/12	. . . having ice-cutters
65a-35/14	. . Fishing vessels (fishing 45h)
65a-35/16	. . . Trawlers
65a-35/18	. . . . adapted to dragging nets aboard
65a-35/20	. . . . adapted to hoisting nets aboard
65a-35/22	. . . Whale catchers; Whale factory vessels
65a-35/24	. . . Fish holds
65a-35/26	. . . . for live fish
65a-35/28	. . Barges or lighters
65a-35/30	. . . self-discharging
65a-35/32	. . for collecting pollution from open water (cleaning surface of open water 84a)
65a-35/34	. . Pontoons (pontoon bridges 19d-15/14)
65a-35/36	. . . foldable
65a-35/38	. . . Rigidly-interconnected pontoons
65a-35/40	. . for transporting marine vessels
65a-35/42	. . . with adjustable draught
65a-35/44	. . Floating buildings, stores, drilling platforms, or workshops, e.g. carrying water-oil separating devices
65a-35/50	. . Vessels or floating structures for aircraft (aircraft carriers 65g-11/00)
65a-35/52	. . . Landing-nets; Slipway
65a-35/54	. . Ferries (propulsion of chain ferries 65h)
65a-35/56	. . Lightships (marking of navigational route 65a-51/00)
65a-35/58	. . Rafts
65a-35/66	. . Tugs (towing or pushing equipment 65a-21/56)

65a-35/68	. . . for towing
65a-35/70	. . . for pushing
65a-35/72	. . Other pleasure vessels
65a-39/00	Equipment to decrease pitch, roll, or like unwanted vessel movements; Apparatus for indicating vessel attitude
65a-39/02	. to decrease vessel movements by using weights
65a-39/04	. to decrease vessel movements by using gyroscopes directly
65a-39/06	. to decrease vessel movements by using foils acting on ambient water (constructional aspects of bilge keels 65a-3/44)
65a-39/08	. to decrease vessel movements by using auxiliary jets or propellers
65a-39/10	. to decrease vessel movements by pouring oil on water
65a-39/12	. for indicating draught or load
65a-39/14	. for indicating inclination or duration of roll
65a-41/00	Drop keels, e.g. centre boards, side boards (keels integral with hull 65a-3/38; stabilising foils 65a-39/06)
65a-43/00	Improving safety of vessels, e.g. damage control, not otherwise provided for (fire-fighting in ships 61a)
65a-43/02	. reducing risk of capsizing or sinking (by means of watertight doors in bulkheads 65a-43/24)
65a-43/04	. . by improving stability
65a-43/06	. . . using ballast tanks
65a-43/08	. . . by transfer of solid ballast
65a-43/10	. . by improving buoyancy
65a-43/12	. . . using inboard air containers
65a-43/14	. . . using outboard floating members
65a-43/16	. . . Temporary equipment for stopping leaks, e.g. collision mats
65a-43/18	. preventing collision; reducing collision damage
65a-43/20	. . Feelers
65a-43/24	. Arrangements of watertight doors in bulkheads
65a-43/26	. . of sliding type
65a-43/28	. . . with mechanical drive
65a-43/30	. . . with fluid drive
65a-43/32	. . of non-sliding type
65a-45/00	Arrangement or adaptation of signalling or lighting devices (for vehicles in general 20c-27, 21f-61/03, 63c-62)
65a-45/02	. the devices being intended to illuminate the way ahead or other areas of environments
65a-45/04	. the devices being intended to indicate the vessel or parts thereof
65a-45/06	. the devices being intended to illuminate vessels' decks or interior
65a-45/08	. the devices being acoustic
65a-49/00	Arrangements of nautical instruments or navigational aids (nautical measuring instruments 42c; simulators for determining ship's trim, stability, bending moment 42n)
65a-51/00	Marking of navigation route
65a-51/02	. with buoys (buoys per se 65a-21/52); with anchored lightships; by use of lighthouses
65a-51/04	. with free-floating flares
65a-57/00	Tank cleaning specially adapted for vessels
65a-57/02	. by washing
65a-57/04	. by ventilating
65a-59/00	Hull protection peculiar to vessels; Cleaning devices peculiar to vessels and integral therewith
65a-59/02	. Fenders; Rubbing-strakes (shore-borne fenders 84a)

65b Dry-docking and launching of ships, underwater work, diving, salvage, rescue (ship raising devices 84b)**Dry-docking and launching devices**

- 65b-1 Shipways and scaffolds used in building and propping up ships
- 65b-2 Launching, hauling up, transporting on wheeled vehicles (for seaplanes 62c-27/02)
- 65b-3 Floating docks, dock ships, airplane docks
- 65b-4 Dry docks
- 65b-5 Other devices for docking ships, test docks for submarines
- 65b-6 Dock equipment

Underwater work, diving

- 65b-7 Craft for underwater work and submersible devices such as diving bells
- 65b-8 Flexible diving suits
- 65b-9 Rigid diving suits, armour-plated diving devices
- 65b-10 Independent divers (breathing devices 61a-29)
- 65b-11 Other diving devices and elements

Salvage

- 65b-12 Salvage craft with hoisting gear
- 65b-13 Salvage craft with rigid submersible bodies
- 65b-14 Salvage craft with inflatable submersible bodies
- 65b-15 Ice salvage
- 65b-16 Other hoisting methods
- 65b-17 Hoisting devices: hoisting gear, hawser guides and fastenings
- 65b-18 Marking the position of sunken ships and other objects, marker buoys
- 65b-19 Searching and locating the position of wrecks and other objects, especially by means of grapples and drag anchors, and the structure thereof (by electromagnetic means 21g-30/10)
- 65b-20 Refloating grounded ships

Sea rescue

- 65b-21 Shore rescue
- 65b-22 Life boats
- 65b-23 Rafts, inflatable rafts, inflatable rubber dinghies 65c-4)
- 65b-24 Lifebuoys and buoyant containers
- 65b-25 Ship (hull) sections equipped for rescue, also divers' locks and buoyant containers in submarines
- 65b-26 Shipboard articles designed for rescue purposes
- 65b-27 Life suits and rings with buoyant linings
- 65b-28 Life suits and rings, etc., air-filled, inflatable (floating toy animals 77a)
- 65b-29 Life suits, etc., with air-filled hollow sections
- 65b-30 Life suits, etc., with expanding devices, automatically air-inflated
- 65b-31 Life-suits, etc., gas-filled
- 65b-32 Life suits, etc., with illumination
- 65b-33 Other rescue gear

65b (IPC: B63C) Launching, hauling-out, or dry-docking of vessels; Life-saving in water; Equipment for dwelling or working under water; Means for salvaging or searching for underwater objects**65b-1/00 Dry-docking of vessels or flying-boats (storing of vessels on land otherwise than by dry-docking 65b-15/00; mooring of vessels 65a-21/00; hydraulic-engineering aspects 84a)**

- 65b-1/02 . Floating decks (ship transporters with adjustable draught 65a-35/42)
- 65b-1/04 . . self-docking

65b-1/06	. . Arrangements of pumping or filling equipment for raising or lowering docks
65b-1/08	. Graving docks
65b-1/10	. Centring devices
65b-1/12	. Docks adapted for special vessels, e.g. submarines
65b-3/00	Launching or hauling-out by landborne slipways; Slipways (ship-borne guides for handling lifeboats or the like 65a-23/30; cranes, winches, or the like 35; ship-lifting for adapting to different water levels 84b)
65b-3/02	. by longitudinal movement of vessel
65b-3/04	. by sideways movement of vessel
65b-3/06	. by vertical movement of vessel
65b-3/08	. Tracks on slipways
65b-3/10	. using releasing devices
65b-3/12	. using cradles
65b-3/14	. using braking means
65b-5/00	Equipment usable both on slipways and in dry docks
65b-5/02	. Stagings; Scaffolding; Shores or struts
65b-5/04	. . Bilge or keel blocks
65b-7/00	Salvaging of disabled, stranded, or sunken vessels; Salvaging of vessel parts or furnishings, e.g. of safes; Salvaging of other underwater objects
65b-7/02	. in which the lifting is done by hauling
65b-7/04	. . using pontoons or the like
65b-7/06	. in which lifting action is generated in, or adjacent to, vessels or objects
65b-7/08	. . using rigid floats
65b-7/10	. . using inflatable floats external to vessels or objects
65b-7/12	. . by bringing air or floating bodies or material into vessels or objects
65b-7/14	. using freezing for closing holes or for strengthening the vessel or the like
65b-7/16	. Apparatus engaging vessels or objects
65b-7/18	. . using nets
65b-7/20	. . using grabs
65b-7/22	. . using electromagnets or suction devices
65b-7/24	. Apparatus for passing chains or the like under vessels or objects
65b-7/26	. Means for indicating the location of underwater objects, e.g. sunken vessels (means for searching for underwater objects 65b-11/48)
65b-7/28	. Refloating stranded vessels
65b-7/30	. Floatable safes
65b-9/00	Life-saving in water (life-saving in general 61a, 62a3; rescue equipment specially adapted for submarine personnel 65g-8/40)
65b-9/02	. Boats, rafts, or the like, specially adapted for life-saving (floatable furniture 65b-9/30; constructional features, ship-borne handling equipment 65a)
65b-9/04	. . Rafts
65b-9/06	. . Floatable closed containers allowing one or more persons to stay inside
65b-9/08	. Life-buoys, e.g. rings; Life-belts, jackets, suits, or the like (swimming aids 77a-31/00)
65b-9/10	. . using solid buoyant material
65b-9/12	. . having gas-filled compartments
65b-9/14	. . . filling by deployment
65b-9/16	. . . inflatable
65b-9/18	. . . characterised by gas-generating device
65b-9/20	. . characterised by signalling means, e.g. lights, reflectors
65b-9/22	. Devices for holding or launching life-buoys, inflatable life-rafts, or other floatable life-saving equipment (equipment for handling life-boats or the like 65a-23/00)
65b-9/24	. Arrangements of inflating valves or of controls thereof (connecting inflating valves to elastic bodies 63e)
65b-9/26	. Cast or life lines; Attachments thereto; Containers therefor (adaptations of aerial cableways to shipboard use 65a-27/18; guns or projectiles for line-throwing 72d-17/05)
65b-9/28	. Adaptations of vessel parts or furnishings to life-saving purposes
65b-9/30	. . Floatable furniture

65b-9/32	. Equipment adapted to use on ice
65b-11/00	Equipment for dwelling or working underwater; Means for searching for underwater objects (swim-fins 77a-31/08)
65b-11/02	. Divers' equipment
65b-11/04	. . Resilient suits
65b-11/06	. . . with rigid helmet
65b-11/08	. . . Control of air pressure within suit, e.g. for controlling buoyancy
65b-11/10	. . Rigid suits
65b-11/12	. . Diving masks (swimming helmets, swimming goggles 77a-33/00)
65b-11/14	. . . with forced air supply
65b-11/16	. . . with air supply by suction from diver, e.g. schnorkels
65b-11/18	. . Air supply (for diving masks 65b-11/14, 65b-11/16)
65b-11/20	. . . from water surface
65b-11/22	. . . carried by diver
65b-11/24	. . . . in closed circulation
65b-11/26	. . Communication means
65b-11/28	. . Heating
65b-11/30	. . Ballast
65b-11/32	. . Decompression arrangements; Exercise equipment
65b-11/34	. Movable diving chambers (caissons adapted to laying foundations 84c)
65b-11/36	. . of closed type
65b-11/38	. . . with entrance above water surface
65b-11/40	. . . adapted to specific work
65b-11/42	. . . with independent propulsion or directional control
65b-11/44	. . of open type, e.g. diving-bells
65b-11/46	. Divers' sleds or like craft, i.e. craft on which man in diving-suit rides
65b-11/48	. Means for searching for underwater objects (means for indicating the location of sunken vessels 65b-7/26; echo-sounding apparatus 74d-6/15)
65b-11/50	. . using grapnels
65b-13/00	Equipment forming part of, or attachable to, vessels, facilitating transport over land (amphibious craft, land vehicles convertible for use on water 65a-35/72)
65b-15/00	Storing of vessels on land otherwise than by dry-docking
65c	Boats and other craft, inclusive of those with manual and pedal drive
65c-1	Rigid boats, according to design and material (life boats 65b-22)
65c-2	Collapsible boats
65c-3	Folding boats
65c-4	Rubber dinghies, not as rescue gear (inflatable rafts 65b-23)
65c-5	Boats in sections
65c-6	Boats with tubular or box floats
65c-7	Surfboards, swimming and bathing gear, as pure buoyant devices (swimming propulsion devices 77a-14, 77a-31/00; water skis 77b-16, 77b-15/00)
65c-8	Centreboards, boat tanks, outriggers
65c-9	Miscellaneous equipment, e.g. hand steering devices, deck awnings, seats, general
65c-10	Rolling and sliding seats
65c-11	Boat oars
65c-12	Oar locks
65c-13	Other rowing equipment
65c-14	Rowing, facing forward
65c-15	Manual and pedal drives
65c-16	Bicycles on floats

65d**Torpedoes**

- 65d-1 Torpedo bodies
- 65d-2/01 Depth control (62b-11 – 62b-14)
- 65d-2/02 Azimuth control (62b-11 – 62b-14)
- 65d-3 Remote control (65f2-18; 21a4-48/55; 62c-29)
- 65d-4/01 Mechanical detonation (72i)
- 65d-4/02 Electrical detonation (72i)
- 65d-4/03 Chemical detonation (72i)

- Torpedo propulsion
- 65d-5/01 Reciprocating engines
- 65d-5/02 Turbines
- 65d-5/03 Internal-combustion engines
- 65d-5/04 Electric motors
- 65d-5/05 Other means

- 65d-6 Torpedo launchers
- 65d-7 Auxiliary devices for torpedo operation
- 65d-8 Protection against torpedoes and submarines

65e**Naval mines**

- 65e-1 Types and shapes
- 65e-2 Mooring
- 65e-3/01 Mechanical detonation (72i)
- 65e-3/02 Electrical detonation (72i)
- 65e-3/03 Chemical detonation (72i)
- 65e-4 Depth regulation and submersion laying devices
- 65e-5/01 Mine fields
- 65e-5/02 Mine laying devices
- 65e-5/03 Mine detecting devices, mine disposal

65f1**Ship propulsion****Marine engines, insofar as the designs and construction are substantially modified by installations on ships**

- 65f1-1 Reciprocating engine plants (14a)
- 65f1-2 Turbine plants (14c-15)
- 65f1-2/50 Boiler plants (13a)
- 65f1-3 Electrical motor plants (21c; 21d)
- 65f1-4 Internal-combustion engine plants (46)
- 65f1-4/10 Boat motors
- 65f1-4/20 Outboard motors
- 65f1-5 Combined plants
- 65f1-6 Wind-powered engines
- 65f1-6/10 Water-powered engines
- 65f1-6/20 Airscrew propulsion
- 65f1-6/30 Jet propulsion
- 65f1-6/40 Engine propelled land vehicles on floats
- 65f1-7 Other propulsion engines and types of propulsion

Towage

- 65f1-8 Tugs and barge trains
- 65f1-9 Chain tugs
- 65f1-10 Towing from the bank

- 65f1-11 Towing with travelling crab from path in or above the water
- 65f1-12 Independent propulsion equipment in towed barges
- 65f1-13 Rope ferries
- 65f1-14 Tow hooks
- 65f1-15 Elements, hawsers, chains

65f2 Shipboard machinery

Auxiliary machines

- 65f2-1 Feed water generators, evaporators, preheaters
- 65f2-2 Condenser installations
- 65f2-3 Ventilators, forced draft
- 65f2-4 Marine engine governors influenced by the motion of the ship (general 60-12)
- 65f2-5 Exhaust devices
- 65f2-6 Vibration prevention in engine plants and shaft transmission (42c-25)
- 65f2-7 Ash ejectors
- 65f2-8 Engine signalling
- 65f2-9 Gearings and transmissions
- 65f2-10 Pump arrangements
- 65f2-11 Special auxiliary engine installations for steamships
- 65f2-12 Special auxiliary engine installations for motor ships
- 65f2-13 Special auxiliary engine installations for submarines

Steering gear

- 65f2-14 Steam steering gears
- 65f2-15 Electrical steering gears
- 65f2-16 Hydraulic and pneumatic steering gears
- 65f2-17 Hand steering devices
- 65f2-18 Remote control (65d-3, radio transmitting and receiving equipment 21a4-48/51 – 21a4-48/63)
- 65f2-19 Automatic steering devices in conjunction with the compass
- 65f2-20 Elements
- 65f2-21 Rudder signalling

65f3 Propellers

Paddle wheels

- 65f3-1 Arrangement on and in the ship
- 65f3-2 Wheels with fixed paddles
- 65f3-3 Wheels with movable paddles
- 65f3-4 Wheels with steering box
- 65f3-4/10 Buoyant drums as propellers
- 65f3-4/20 Paddle chain drive
- 65f3-5 Stern wheels

Screws

- 65f3-6 Arrangement on and in the ship
- 65f3-7 Screws which can be pivotable, raised and lowered
- 65f3-8 Screw shapes
- 65f3-9 Blade shapes
- 65f3-10 Blade arrangement
- 65f3-11 Blade construction and manufacture
- 65f3-12 Adjustable blades
- 65f3-13 Screws with casings
- 65f3-14 Screw wash control devices (as rudders 65a2-5)

65f3-15	Devices for improving efficiency
65f3-16	Oscillating and reciprocating propellers
65f3-17	Fishtail and fin-shaped propellers
65f3-18	Screw hubs, blade attachment
65f3-19	Shaft transmission, shaft bearings
65f3-20	Stern tubes
65f3-21	Couplings
65f3-22	Screw protection

65g	(IPC: B63G) Offensive or defensive arrangements on vessels; Mine-laying; Mine-sweeping; Submarines; Aircraft carriers (means of attack or defence in general 72g)
65g-1/00	Arrangements of guns or missile launchers; Vessels characterised thereby (submarines 65g-8/00; guns, missile launchers 72c-16/05)
65g-3/00	Arrangements of ammunition stores or handlers (specially for submarines 65g-8/00); Vessels characterised thereby (general cargo aspects 65a)
65g-3/02	. for torpedoes
65g-3/04	. for missiles
65g-3/06	. for mines or depth charges
65g-5/00	Vessels characterised by adaptation to torpedo-launching (submarines 65g-8/00; torpedo-launching per se 65d-6)
65g-6/00	Laying of mines or depth charges; Vessels characterised thereby
65g-7/00	Mine-sweeping; Vessels characterised thereby
65g-7/02	. Mine-sweeping means; Means for destroying mines
65g-7/04	. . by means of cables
65g-7/06	. . of electromagnetic type
65g-7/08	. . of acoustic type
65g-8/00	Submarines (submarine hulls 65a-3/13; torpedoes 65d)
65g-8/04	. Superstructure
65g-8/06	. . Conning-towers
65g-8/08	. Propulsion (nuclear propulsion 65h-21/18; submerged exhausting apparatus 14k-7/12)
65g-8/10	. . using steam plant
65g-8/12	. . using internal-combustion engines
65g-8/14	. Control of attitude or depth (of torpedoes 65d-2/01, 65d-2/02)
65g-8/16	. . by direct use of propellers or jets
65g-8/18	. . by hydroplanes
65g-8/20	. . Steering equipment (65g-8/16 takes precedence)
65g-8/22	. . Adjustment of buoyancy by water ballasting; Emptying equipment for ballast tanks
65g-8/24	. . Automatic depth adjustment; Safety equipment for increasing buoyancy, e.g. detachable ballast, floating bodies
65g-8/26	. . Trimming equipment
65g-8/28	. Arrangement of offensive or defensive equipment
65g-8/30	. . of artillery or missile-launching means
65g-8/32	. . of torpedo-launching means (torpedo-launching means per se 65d-6); of torpedo storage
65g-8/34	. . Camouflage
65g-8/36	. Adaptations of ventilation, cooling, heating, or air-conditioning (reconditioning air in sealed chambers 61a-29/06; air-conditioning in general 36d)
65g-8/38	. Arrangement of visual or electronic watch equipment, e.g. of periscopes, of radar
65g-8/39	. Arrangements of sonic watch equipment, e.g. low-frequency, sonar
65g-8/40	. Rescue equipment for personnel (life-saving in water, not specially adapted for submarine personnel 65b)

65g-9/00	Other offensive or defensive arrangements on vessels against submarines, torpedoes, or mines
65g-9/02	. Means for protecting vessels against torpedo attack (armoured hulls 65a-3/10)
65g-9/04	. . Nets or the like
65g-9/06	. for degaussing vessels (demagnetising in general 21g-5)
65g-11/00	Aircraft carriers (other vessels or floating structures for aircraft 65a-35/50; launching or arresting gear for aircraft 62a4)
65g-13/00	Other offensive or defensive arrangements on vessels; Vessels characterised thereby
65h	(IPC: B63H) Marine propulsion or steering (peculiar to submarines, other than nuclear propulsion, 65g; peculiar to torpedoes 65d)
65h-1/00	Propulsive elements directly acting on water (jet propulsion 65h-11/00)
65h-1/02	. of rotary type (endless-track type 65h-1/34)
65h-1/04	. . with rotation axis substantially at right angles to propulsive direction
65h-1/06	. . . with adjustable vanes or blades
65h-1/08	. . . . with cyclic adjustment
65h-1/10	. . . . . of Voith-Schneider type, i.e. with blades extending axially from a disc-shaped rotary body
65h-1/12	. . with rotation axis substantially in propulsive direction
65h-1/14	. . . Propellers (pitch changing 65h-3/00)
65h-1/16	. . . . having a shrouding ring attached to blades
65h-1/18	. . . . with means for diminishing cavitation, e.g. supercavitation
65h-1/20	. . . . Hubs; Blade connections
65h-1/22	. . . . . the blades being foldable
65h-1/24	. . . . . automatically foldable or unfoldable
65h-1/26	. . . . Blades
65h-1/28	. . . . Other means for improving propeller efficiency (water-guiding elements formed by shape of hull 65h-5/00)
65h-1/30	. of non-rotary type
65h-1/32	. . Flaps, pistons, or the like, reciprocating in propulsive direction
65h-1/34	. . of endless-track type
65h-1/36	. . swinging sideways, e.g. fishtail type
65h-1/38	. characterised solely by flotation properties, e.g. drums
65h-3/00	Propeller-blade pitch changing
65h-3/02	. actuated by control element coaxial with propeller shaft, e.g. the control element being rotary
65h-3/04	. . the control element being reciprocable
65h-3/06	. characterised by use of non-mechanical actuating means, e.g. electrical
65h-3/08	. . fluid
65h-3/10	. characterised by having pitch control conjoint with propulsion-plant control
65h-3/12	. characterised by being adjustable only when propeller is stationary
65h-5/00	Arrangements on vessels of propulsion elements directly acting on water
65h-5/02	. of paddle wheels, e.g. of stern wheels
65h-5/04	. . with stationary water-guiding elements
65h-5/06	. of propellers
65h-5/08	. . of more than one propeller
65h-5/10	. . . of coaxial type, e.g. of counter-rotative type
65h-5/12	. . adjustable in position or direction e.g. in combination with gearing elements peculiar thereto (for steering purposes 65h-25/42)
65h-5/14	. . characterised by being mounted in non-rotating ducts or rings, e.g. adjustable for steering purposes (shrouding ring attached to blades 65h-1/16; jet propulsion 65h-11/00)
65h-5/16	. . characterised by being mounted in recesses; with stationary water-guiding elements; Propeller guards
65h-5/18	. . of emergency propellers, e.g. arranged at the side of the vessel

65h-7/00	Arrangements of propulsive devices directly acting on air (jet propulsion 65h-11/00)
65h-7/02	. using propellers (air-screws of aircraft type 62a2)
65h-9/00	Propulsive devices directly acted on by wind; Arrangements thereof (air-driven propellers driving underwater propulsive elements 65h-13/00)
65h-9/02	. using Magnus effect
65h-9/04	. using sails or like wind-catching surfaces
65h-9/06	. . Construction or types of sails; Arrangements thereof on vessels
65h-9/08	. . Connections of sails to masts, spars, or the like
65h-9/10	. . . Spars; Running rigging, e.g. reefing equipment (staying of masts 65a-15/02)
65h-11/00	Effecting propulsion by jets, i.e. reaction principle (steering by jet action 65h-25/46; power plant per se, see the relevant classes)
65h-11/02	. the propulsive medium being ambient water
65h-11/04	. . by means of pumps
65h-11/06	. . . of reciprocating type
65h-11/08	. . . of rotary type
65h-11/10	. . having means for deflecting jet or influencing cross-section thereof
65h-11/12	. the propulsive medium being steam or other gas
65h-11/14	. . the gas being produced by combustion
65h-11/16	. . the gas being produced by other chemical processes
65h-13/00	Effecting propulsion by wind motors driving water-engaging propulsive elements
65h-15/00	Effecting propulsion by use of vessel-mounted driving mechanisms co-operating with anchored chains or the like
65h-16/00	Effecting propulsion by muscle power (swimming frameworks with swimmer-operated driving mechanisms, land-based training equipment for rowing or sculling 77a-69/06)
65h-16/02	. Movable thwarts; Foot-rests
65h-16/04	. Oars; Sculls; Paddles; Poles
65h-16/06	. Rowlocks; Mountings therefor
65h-16/08	. Other apparatus for converting muscle power into propulsive effort (general features of propulsion elements, see the relevant groups)
65h-16/10	. . for bow-facing rowing
65h-16/12	. . using hand levers, cranks, pedals, or the like, e.g. water cycles, boats propelled by boat-mounted pedal cycles
65h-16/14	. . . for propelled drive
65h-19/00	Effecting propulsion of vessels, not otherwise provided for
65h-19/02	. by using energy derived from movement of ambient water, e.g. from rolling or pitching of vessels
65h-19/04	. . propelled by water current
65h-19/06	. by discharging gas into ambient water (with jet action 65h-11/12; for reducing surface friction 65a-1/38)
65h-19/08	. by direct engagement with water-bed or ground
65h-21/00	Use of propulsion power plant or units on vessels (hull reinforcements for carrying propulsion power plant or units 65a-3/70; propulsion power plant or units per se, see the relevant classes)

Note:

This group comprises arrangements of propulsion power plant or units on vessels, and to some extent it includes adaptations of such plant or units to facilitate such arrangements.

65h-21/02	. the vessels being steam-driven (65h-21/18 takes precedence)
65h-21/04	. . relating to positive-displacement steam engines
65h-21/06	. . relating to steam turbines
65h-21/08	. . relating to steam boilers

65h-21/10	. . relating to condensers or engine-cooling fluid heat-exchangers
65h-21/12	. the vessels being motor-driven
65h-21/14	. . relating to internal-combustion engines (of outboard type 65h-21/26)
65h-21/16	. . relating to gas turbines
65h-21/18	. the vessels being powered by nuclear energy
65h-21/20	. the vessels being powered by combinations of different types of propulsion unit
65h-21/22	. the propulsion power units being controlled from exterior of engine room, e.g. from navigation bridge; Arrangements of order telegraphs (order telegraphs per se 74c)
65h-21/24	. the vessels being small craft, e.g. racing boats
65h-21/26	. . of outboard type; Outboard propulsion power units movably installed for steering, reversing, tilting, or the like
65h-21/28	. . . Arrangements of transmission between propulsion power unit and propulsive element
65h-21/30	. Mounting of propulsion plant or unit, e.g. for anti-vibration purposes (hull reinforcements therefor 65a-3/70; vibration-dampers, suppression of vibration in systems 47a3; engine beds per se 47a2)
65h-21/32	. Arrangements of propulsion power-unit exhaust uptakes; Funnels peculiar to vessels (engine exhausts in general 14k; flue devices for furnaces in general 24g)
65h-21/34	. . having exhaust-gas deflecting means
65h-23/00	Transmitting power from propulsion power plant to propulsive elements (changing pitch of propellers 65h-3/00; adaptation of transmission to allow adjustment in location or direction of propellers 65h-5/12; transmission between wind motors and propulsive elements 65h-13/00; for outboard propulsion power units 65h-21/26; driving auxiliary machinery 65j; transmission elements per se 47)
65h-23/02	. with mechanical gearing
65h-23/04	. . the main transmitting element, e.g. shaft, being substantially vertical
65h-23/06	. . for transmitting drive from a single propulsion power unit
65h-23/08	. . . with provision for reversing drive
65h-23/10	. . for transmitting drive from more than one propulsion power unit (for synchronisation of propulsive elements 65h-23/28)
65h-23/12	. . . allowing combined use of the propulsion power units
65h-23/14	. . . . with unidirectional drive or where reversal is immaterial
65h-23/16	. . . . characterised by provision of reverse drive
65h-23/18	. . . for alternative use of the propulsion power units
65h-23/20	. . . . with separate forward and astern propulsion power units, e.g. turbines
65h-23/22	. with non-mechanical gearing
65h-23/24	. . electric
65h-23/26	. . fluid
65h-23/28	. with synchronisation of propulsive elements
65h-23/30	. characterised by use of clutches
65h-23/32	. Other parts
65h-23/34	. . Propeller shafts; Paddle-wheel shafts (shafts in general 47b)
65h-23/36	. . Shaft tubes (propeller-shaft tunnels 65a-11/06; shaft-tube seals per se 47f2-15/00)
65h-25/00	Steering; Slowing-down otherwise than by use of propulsive elements (using adjustably-mounted propeller ducts or rings for steering 65h-5/14; movably-installed outboard motors 65h-21/26)
65h-25/02	. Initiating means for steering
65h-25/04	. . automatic, e.g. reacting to compass
65h-25/06	. Steering by rudders (by rudders carrying propellers 65h-25/42)
65h-25/08	. . Steering gear
65h-25/10	. . . with mechanical transmission
65h-25/12	. . . with fluid transmission
65h-25/14	. . . power assisted; power driven, i.e. using steering engine
65h-25/16	. . . . with alternative muscle or power-operated steering
65h-25/18	. . . . Transmitting of movement of initiating means to steering engine
65h-25/20	. . . . . by mechanical means
65h-25/22	. . . . . by fluid means

- 65h-25/24 by electrical means
- 65h-25/26 Steering engines (power units per se, see the relevant classes)
- 65h-25/28 of fluid type
- 65h-25/30 hydraulic
- 65h-25/32 steam
- 65h-25/34 Transmitting of movement of engine to rudder, e.g. using quadrants, brakes
- 65h-25/36 Rudder-position indicators
- 65h-25/38 Rudders (stern posts 65a-3/40)
- 65h-25/40 utilising Magnus effect
- 65h-25/42 Steering by propulsive elements (with propulsion jets 65h-25/46); Steering by propellers used for steering only; Steering by rudders carrying propellers
- 65h-25/44 Steering or slowing-down by extensible flaps or the like
- 65h-25/46 Steering by jets
- 65h-25/48 Steering or slowing-down by deflection of propeller slip-stream otherwise than by rudder
- 65h-25/50 Slowing-down means not otherwise provided for
- 65h-25/52 Parts for steering not otherwise provided for

65j (IPC: B63J) Auxiliaries on vessels

Note:

The term "auxiliaries" in this subclass means only apparatus specially arranged for rendering vessels, in general, habitable or operative, in so far as such apparatus is not specifically provided for in another subclass of class 65.

- 65j-1/00 Arrangements of installations for producing fresh water, e.g. by evaporation and condensation of sea water**
- 65j-2/00 Arrangements of ventilation, heating, cooling, or air-conditioning (in general 36d; ventilating for cleaning tanks 65a-57/04; for submarines 65g-8/00)**
 - 65j-2/02 Ventilation; Air-conditioning
 - 65j-2/04 of living spaces
 - 65j-2/06 of engine rooms
 - 65j-2/08 of holds (heating or cooling of liquid-freight-carrying tanks 65j-2/14)
 - 65j-2/10 Ventilating-shafts; Air-scoops (for port-holes 65a-19/04)
 - 65j-2/12 Heating; Cooling
 - 65j-2/14 of liquid-freight-carrying tanks
- 65j-3/00 Driving of auxiliaries (transmission elements per se 47)**
 - 65j-3/02 from propulsion power plant
 - 65j-3/04 from power plant other than propulsion power plant
- 65j-5/00 Vessel auxiliaries, not otherwise provided for**