

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B63 SHIPS OR OTHER WATERBORNE VESSELS; RELATED EQUIPMENT

B63H MARINE PROPULSION OR STEERING (propulsion of air-cushion vehicles [B60V 1/14](#); specially adapted for submarines, other than nuclear propulsion, [B63G](#); specially adapted for torpedoes [F42B 19/00](#))

NOTE

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

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	Propulsive elements directly acting on water (jet propulsion B63H 11/00)	2001/185	. . . . . {Surfacing propellers, i.e. propellers specially adapted for operation at the water surface, with blades incompletely submerged, or piercing the water surface from above in the course of each revolution}
2001/005	. {using Magnus effect}		
1/02	. of rotary type		
1/04	. . with rotation axis substantially at right angles to propulsive direction		
2001/045	. . . {with partially immersed nutating or undulated disks, e.g. wobble plates}	1/20	. . . . Hubs; Blade connections
1/06	. . . with adjustable vanes or blades	1/22	. . . . . the blades being foldable
1/08	. . . . with cyclic adjustment	1/24	. . . . . automatically foldable or unfoldable
1/10	. . . . . of Voith Schneider type, i.e. with blades extending axially from a disc-shaped rotary body	1/26	. . . . Blades
2001/105	. . . . . {with non-mechanical control of individual blades, e.g. electric or hydraulic control}	1/265	. . . . . {each blade being constituted by a surface enclosing an empty space, e.g. forming a closed loop}
1/12	. . with rotation axis substantially in propulsive direction	1/28	. . . . Other means for improving propeller efficiency
2001/122	. . . {Single or multiple threaded helicoidal screws, or the like, comprising foils extending over a substantial angle; Archimedean screws}	2001/283	. . . . . {Propeller hub caps with fins having a pitch different from pitch of propeller blades, or a helix hand opposed to the propellers' helix hand}
2001/125	. . . . {with helicoidal foils projecting from outside surfaces of floating rotatable bodies, e.g. rotatable, cylindrical bodies}	2001/286	. . . . . {Injection of gas into fluid flow to propellers, or around propeller blades}
2001/127	. . . . {with helicoidal foils projecting from inside surfaces of rotating shrouds; Archimedean screws}	1/30	. of non-rotary type
1/14	. . . Propellers (pitch changing B63H 3/00)	1/32	. . Flaps, pistons, or the like, reciprocating in propulsive direction
2001/145	. . . . {comprising blades of two or more different types, e.g. different lengths}	1/34	. . of endless-track type
1/15	. . . . having vibration damping means	2001/342	. . . {with tracks substantially parallel to propulsive direction}
1/16	. . . . having a shrouding ring attached to blades	2001/344	. . . . {having paddles mounted in fixed relation to tracks, or to track members}
2001/165	. . . . . {Hubless propellers, e.g. peripherally driven shrouds with blades projecting from the shrouds' inside surfaces}	2001/346	. . . . {having paddles movably mounted on the track or on track members, e.g. articulated, or with means for cyclically controlling the paddles' angular position or orientation}
1/18	. . . . with means for diminishing cavitation, e.g. supercavitation	2001/348	. . . {with tracks oriented transverse to propulsive direction}
		1/36	. . swinging sideways, e.g. fishtail type
		1/37	. . Moving-wave propellers, i.e. wherein the propelling means comprise a flexible undulating structure

- 1/38 . characterised solely by flotation properties, e.g. drums
- 3/00 Propeller-blade pitch changing** {(aircraft propellers [B64C 11/30](#); rotors of turbines [F01D 7/00](#); axial wind motors [F03D 7/022](#); axial-flow pumps [F04D 29/00](#))}
- 3/002 . {with individually adjustable blades}
- 2003/004 . {comprising means for locking blades in position}
- 2003/006 . {Detecting or transmitting propeller-blade pitch angle}
- 3/008 . {characterised by self-adjusting pitch, e.g. by means of springs, centrifugal forces, hydrodynamic forces}
- 3/02 . actuated by control element coaxial with propeller shaft, e.g. the control element being rotary {([B63H 3/002](#) takes precedence, fluid actuated [B63H 3/081](#))}
- 3/04 . . the control element being reciprocable
- 3/06 . characterised by use of non-mechanical actuating means, e.g. electrical ([B63H 3/002](#) takes precedence)
- 3/08 . . fluid
- 3/081 . . . {actuated by control element coaxial with the propeller shaft}
- 3/082 {the control element being axially reciprocable}
- 2003/084 {with annular cylinder and piston}
- 2003/085 {the control element having means for preventing rotation together with the propeller}
- 2003/087 . . . {using gaseous fluids, e.g. steam or air}
- 2003/088 . . . {characterised by supply of fluid actuating medium to control element, e.g. of hydraulic fluid to actuator co-rotating with the propeller}
- 3/10 . characterised by having pitch control conjoint with propulsion plant control
- 3/12 . the pitch being adjustable only when propeller is stationary ([B63H 3/002](#) takes precedence)
- 5/00 Arrangements on vessels of propulsion elements directly acting on water**
- 2005/005 . {Front propulsors, i.e. propellers, paddle wheels, or the like substantially arranged ahead of the vessels' midship section}
- 5/02 . of paddle wheels, e.g. of stern wheels
- 2005/025 . . {of Voith Schneider type}
- 5/03 . . movably mounted with respect to the hull, e.g. having means to reposition paddle wheel assembly, or to retract paddle or to change paddle attitude
- 5/04 . . with stationary water-guiding elements
- 5/07 . of propellers (forming part of outboard units {or Z-drives} [B63H 20/00](#))
- 2005/075 . . {using non-azimuthing podded propulsor units, i.e. podded units without means for rotation about a vertical axis, e.g. rigidly connected to the hull}
- 5/08 . . of more than one propeller
- 5/10 . . . of coaxial type, e.g. of counter-rotative type
- 2005/103 {of co-rotative type, i.e. rotating in the same direction, e.g. twin propellers}
- 2005/106 {with drive shafts of second or further propellers co-axially passing through hub of first propeller, e.g. counter-rotating tandem propellers with co-axial drive shafts}
- 5/125 . . . movably mounted with respect to hull, e.g. adjustable in direction {, e.g. podded azimuthing thrusters}(({outboard units or Z-drives [B63H 20/00](#); } movably mounted for steering purposes only, {rudders carrying propellers} [B63H 25/42](#))
- WARNING**
- Group [B63H 5/125](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#). All groups listed in this Warning should be considered in order to perform a complete search.
- 5/1252 . . . {the ability to move being conferred by gearing in transmission between prime mover and propeller and the propulsion unit being other than in a "Z" configuration}
- WARNING**
- Group [B63H 5/1252](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#). All groups listed in this Warning should be considered in order to perform a complete search.
- 2005/1254 . . . {Podded azimuthing thrusters, i.e. podded thruster units arranged inboard for rotation about vertical axis}
- WARNING**
- Group [B63H 2005/1254](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#). All groups listed in this Warning should be considered in order to perform a complete search.
- 2005/1256 {with mechanical power transmission to propellers}
- WARNING**
- Group [B63H 2005/1256](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#). All groups listed in this Warning should be considered in order to perform a complete search.
- 2005/1258 {with electric power transmission to propellers, i.e. with integrated electric propeller motors}
- WARNING**
- Group [B63H 2005/1258](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#). All groups listed in this Warning should be considered in order to perform a complete search.

- 5/14 . . characterised by being mounted in non-rotating ducts or rings, e.g. adjustable for steering purpose (shrouding ring attached to blades [B63H 1/16](#); jet propulsion [B63H 11/00](#))
- 5/15 . . . Nozzles, e.g. Kort-type
- 5/16 . . characterised by being mounted in recesses; with stationary water-guiding elements; Means to prevent fouling of the propeller, e.g. guards, cages or screens
- 5/165 . . . {Propeller guards, line cutters or other means for protecting propellers or rudders}
- 5/18 . . of emergency propellers, e.g. arranged at the side of the vessel
- 5/20 . . . movable from a working position to a non-working position {(movable arrangements of propellers in general [B63H 5/125](#); outboard propulsion units in general [B63H 20/00](#); steering or dynamic anchoring by propellers used therefore only, or by rudders carrying propellers [B63H 25/42](#))}

Propulsion using air or wind

7/00 Propulsion directly actuated on air (jet propulsion [B63H 11/00](#))

- 7/02 . using propellers

8/00 Sail or rigging arrangements specially adapted for water sports boards, e.g. for windsurfing or kitesurfing

WARNING

Group [B63H 8/00](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/04](#) and [B63H 9/06](#).

Group [B63H 8/00](#) is also impacted by reclassification into groups [B63H 8/20](#), [B63H 8/23](#), [B63H 8/25](#), [B63H 8/40](#), [B63H 8/50](#), [B63H 8/52](#), [B63H 8/54](#), [B63H 8/56](#), [B63H 8/58](#) and [B63H 8/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/10 . Kite-sails; Kite-wings; Control thereof; Safety means therefor

WARNING

Group [B63H 8/10](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/04](#), [B63H 9/06](#) and [B64C 31/06](#).

Group [B63H 8/10](#) is also impacted by reclassification into groups [B63H 8/12](#), [B63H 8/14](#), [B63H 8/23](#), [B63H 8/25](#), [B63H 8/50](#), [B63H 8/52](#), [B63H 8/54](#), [B63H 8/56](#), [B63H 8/58](#) and [B63H 8/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/12 . . Kites with inflatable closed compartments

WARNING

Group [B63H 8/12](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 8/10](#), [B63H 9/04](#), [B63H 9/06](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/14 . . Ram-air kites, i.e. kites at least partly inflated by air entering their leading edges during use

WARNING

Group [B63H 8/14](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 8/10](#), [B63H 9/04](#), [B63H 9/06](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/16 . . Control arrangements, e.g. control bars or control lines

WARNING

Group [B63H 8/16](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

Group [B63H 8/16](#) is also impacted by reclassification into groups [B63H 8/18](#), [B63H 8/23](#), [B63H 8/25](#), [B63H 8/50](#), [B63H 8/52](#), [B63H 8/54](#), [B63H 8/56](#) and [B63H 8/58](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/18 . . Arrangements for connecting the user to a kite-sail; Kite-safety means, e.g. chicken loops, safety leashes or quick release mechanisms

WARNING

Group [B63H 8/18](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 8/16](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/20 . Rigging arrangements involving masts, e.g. for windsurfing

WARNING

Group [B63H 8/20](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 8/00](#), [B63H 9/04](#) and [B63H 9/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/21 . . Wishbones

WARNING

Group [B63H 8/21](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/04](#) and [B63H 9/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/22 . . for connecting wishbones to the mast

WARNING

Group [B63H 8/22](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/04](#) and [B63H 9/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/23 . . for tensioning or trimming the clew of the sail, e.g. outhaul trimmers

WARNING

Group [B63H 8/23](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 8/52](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/24 . . Arrangements for connecting the rigging to a board

WARNING

Group [B63H 8/24](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63B 1/24](#) - [B63B 1/30](#), [B63B 32/00](#), [B63B 32/68](#), [B63B 35/00](#), [B63H 9/04](#) and [B63H 9/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/25 . . Arrangements for connecting the sail to a mast foot, e.g. downhaul tensioners or mast foot extensions

WARNING

Group [B63H 8/25](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 8/52](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/40 . Arrangements for improving or maintaining the aerodynamic profile of sails, e.g. cambers, battens or foil profiles

WARNING

Group [B63H 8/40](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 8/00](#), [B63H 9/04](#), [B63H 9/06](#) and [B63H 9/065](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/50 . Accessories, e.g. repair kits or kite launching aids

WARNING

Group [B63H 8/50](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/52 . . Handheld cleats, cams or hooks for tensioning the downhaul or outhaul of a windsurfing sail

WARNING

Group [B63H 8/52](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00 - B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

Group [B63H 8/52](#) is also impacted by reclassification into groups [B63H 8/23](#) and [B63H 8/25](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/54 . . Arrangements for connecting the user or the harness to the wishbone, e.g. trapeze lines or handgrips

WARNING

Group [B63H 8/54](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00 - B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

Group [B63H 8/54](#) is also impacted by reclassification into groups [B63H 8/56](#) and [B63H 8/58](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/56 . . Devices to distribute the user's load, e.g. harnesses

WARNING

Group [B63H 8/56](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00 - B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 8/54](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/58 . . . Spreader bars; Hook connection arrangements

WARNING

Group [B63H 8/58](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00 - B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 8/16](#), [B63H 8/54](#), [B63H 9/04](#), [B63H 9/06](#), [B63H 9/072](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 8/70 . Arrangements for handling, stowing or transport thereof

WARNING

Group [B63H 8/70](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00 - B62B 15/005](#), [B63B 7/085](#), [B63B 7/087](#), [B63B 32/00](#), [B63B 32/70](#), [B63B 32/80](#), [B63B 35/00](#), [B63H 8/00](#), [B63H 8/10](#), [B63H 9/04](#), [B63H 9/06](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/00 **Marine propulsion provided directly by wind power** (wind-motors driving underwater propulsive elements [B63H 13/00](#))

- 9/02 . using Magnus effect

- 9/04 . using sails or like wind-catching surfaces (sail or rigging arrangements specially adapted for water sports boards, e.g. for windsurfing or kitesurfing [B63H 8/00](#))

WARNING

Group [B63H 9/04](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#) and [B62B 15/00 - B62B 15/005](#).

Group [B63H 9/04](#) is also impacted by reclassification into groups [B63H 8/00 - B63H 8/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/06 . . Types of sail; Constructional features of sails; Arrangements thereof on vessels

WARNING

Group [B63H 9/06](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#), [B62B 15/001](#), [B62B 15/002](#), [B62B 15/003](#), [B62B 15/004](#) and [B62B 15/005](#).

Group [B63H 9/06](#) is also impacted by reclassification into groups [B63H 8/00](#) - [B63H 8/70](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/061 . . . Rigid sails; Aerofoil sails

WARNING

Group [B63H 9/061](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#) and [B62B 15/00](#) - [B62B 15/005](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/0615 {Inflatable aerofoil sails}

WARNING

Group [B63H 9/0615](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0615](#) should be considered in order to perform a complete search.

- 9/0621 {Rigid sails comprising one or more pivotally supported panels}

WARNING

Group [B63H 9/0621](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0621](#) should be considered in order to perform a complete search.

- 9/0628 {the panels being pivotable about horizontal axes}

WARNING

Group [B63H 9/0628](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0628](#) should be considered in order to perform a complete search.

- 9/0635 {the panels being pivotable about vertical axes}

WARNING

Group [B63H 9/0635](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0635](#) should be considered in order to perform a complete search.

- 9/065 . . . Battens (for water sports board sails [B63H 8/40](#))

WARNING

Group [B63H 9/065](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#) and [B62B 15/00](#) - [B62B 15/005](#).

Group [B63H 9/065](#) is also impacted by reclassification into group [B63H 8/40](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/067 . . . Sails characterised by their construction or manufacturing process

WARNING

Group [B63H 9/067](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#), [B62B 15/001](#), [B62B 15/002](#), [B62B 15/003](#), [B62B 15/004](#) and [B62B 15/005](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/0671 {Moulded sails}

WARNING

Group [B63H 9/0671](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0671](#) should be considered in order to perform a complete search.

- 9/0673 {Flying sails, e.g. spinnakers or gennakers}

WARNING

Group [B63H 9/0673](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0673](#) should be considered in order to perform a complete search.

9/0678 {Laminated sails}

WARNING

Group [B63H 9/0678](#) is incomplete pending reclassification of documents from group [A63C 5/11](#).

Groups [A63C 5/11](#) and [B63H 9/0678](#) should be considered in order to perform a complete search.

9/068 . . . Sails pivotally mounted at mast tip

WARNING

Group [B63H 9/068](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/069](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/069 . . . Kite-sails for vessels

WARNING

Group [B63H 9/069](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#) and [B64C 31/06](#).

Group [B63H 9/069](#) is also impacted by reclassification into groups [B63H 9/068](#) and [B63H 9/071](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/071 for use in combination with other propulsion means, e.g. for improved fuel economy

WARNING

Group [B63H 9/071](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#), [B63H 9/069](#) and [B64C 31/06](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/072 Control arrangements, e.g. for launching or recovery

WARNING

Group [B63H 9/072](#) is incomplete pending reclassification of documents from groups [A63C 5/11](#), [A63H 27/08](#), [A63H 27/082](#), [A63H 27/085](#), [A63H 27/087](#), [B60K 16/00](#), [B60K 2016/006](#), [B62B 15/00](#) - [B62B 15/005](#) and [B64C 31/06](#).

Group [B63H 9/072](#) is also impacted by reclassification into groups [B63H 8/16](#), [B63H 8/18](#), [B63H 8/23](#), [B63H 8/25](#), [B63H 8/50](#), [B63H 8/52](#), [B63H 8/54](#), [B63H 8/56](#) and [B63H 8/58](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/08 . . Connections of sails to masts, spars, or the like

2009/082 . . . {Booms, or the like}

2009/084 . . . {Gooseneck bearings, i.e. bearings for pivotal support of booms on masts}

2009/086 . . . {by sliders, i.e. by shoes sliding in, or guided by channels, tracks or rails; for connecting luffs, leeches, battens, or the like to masts, spars or booms}

2009/088 . . . {Means for tensioning sheets, or other running rigging, adapted for being guided on rails, or the like mounted on deck, e.g. travellers or carriages with pulleys}

9/10 . . . Running rigging, e.g. reefing equipment (staying of masts [B63B 15/02](#))

9/1007 {Trapeze systems (harnesses for windsurfers [B63H 8/54](#), [B63H 8/56](#))}

9/1014 {with elastic connection to harnesses}

9/1021 {Reefing}

9/1028 {by furling around stays}

9/1035 {by furling around or inside the mast}

9/1042 {by furling around or inside the boom}

2009/105 {using drives for actuating reefing mechanism, e.g. roll reefing drives}

2009/1057 {using sheaves being friction driven by endless ropes or by ropes having two free ends}

2009/1064 {using drums driven by winding or unwinding single ropes onto or from the drums}

9/1071 {Spinnaker poles or rigging, e.g. combined with spinnaker handling}

9/1078 {Boom brakes}

9/1085 {Boom vangs}

9/1092 {Means for stowing, or securing sails when not in use ([B63H 9/1021](#) takes precedence)}

11/00 Marine propulsion by water jets

2011/002 . {using Coanda effect, i.e. the tendency of fluid jets to be attracted to nearby surfaces}

2011/004 . {using the eductor or injector pump principle, e.g. jets with by-pass fluid paths}

2011/006 . {with propulsive medium supplied from sources external to propelled vessel, e.g. water from public water supply}

2011/008 . {Arrangements of two or more jet units}

11/01	• having means to prevent foreign material from clogging fluid passage way	2016/046	• • {Oars for single-oar sculling, i.e. for propelling boats by swinging single stern-mounted oars from side to side; Use or arrangements thereof on boats}
11/02	• the propulsive medium being ambient water	16/06	• Rowlocks; Mountings therefor
11/025	• • {by means of magneto-hydro-dynamic forces}	2016/063	• • {Rowlocks mounted on movable support structures}
11/04	• • by means of pumps	16/067	• • Rowlocks mounted on a structure extending beyond the gunwale of the vessel
2011/043	• • • {with means for adjusting or varying pump inlets, e.g. means for varying inlet cross section area}	16/073	• • having oar shaft restraining means
2011/046	• • • {comprising means for varying pump characteristics, e.g. rotary pumps with variable pitch impellers, or adjustable stators}	16/08	• Other apparatus for converting muscle power into propulsive effort
11/06	• • • of reciprocating type	2016/085	• • {comprising means for transmitting muscular power applied in oscillatory or rotary manner to a rotary input shaft of a reversing transmission, e.g. alternatively allowing for ahead or astern propulsion}
11/08	• • • of rotary type	16/10	• • for bow-facing rowing
2011/081	• • • • {with axial flow, i.e. the axis of rotation being parallel to the flow direction}	16/102	• • • {by using an inverting mechanism between the handgrip and the blade, e.g. a toothed transmission}
2011/082	• • • • {with combined or mixed flow, i.e. the flow direction being a combination of centrifugal flow and non-centrifugal flow, e.g. centripetal or axial flow}	16/105	• • • • {the mechanism having articulated rods}
2011/084	• • • • {with two or more pump stages}	16/107	• • • {by placing the fulcrum outside the segment defined by handgrip and blade}
2011/085	• • • • • {having counter-rotating impellers}	16/12	• • {using hand levers, cranks, pedals, or the like, e.g. water cycles, boats propelled by boat-mounted pedal cycles}
2011/087	• • • • {with radial flow}	WARNING This group is no longer used for classification of new documents as from 01.01.2012. The backlog of this group is being continuously reclassified to groups B63H 16/16 - B63H 16/20	
2011/088	• • • • {using shear forces, e.g. disc pumps or Tesla pumps}	16/14	• • • {for propelled drive}
11/09	• • • by means of pressure pulses applied to a column of liquid, e.g. by ignition of an air/gas or vapour mixture	WARNING This group is no longer used for classification of new documents as from 01.01.2012. The backlog of this group is being continuously reclassified to groups B63H 16/16 - B63H 16/20	
11/10	• • having means for deflecting jet or influencing cross-section thereof	16/16	• • using reciprocating pull cable, i.e. a strand-like member movable alternately backward and forward
11/101	• • • {having means for deflecting jet into a propulsive direction substantially parallel to the plane of the pump outlet opening}	2016/165	• • • {comprising means for transforming oscillating movement into rotary movement, e.g. for driving propeller shafts}
11/102	• • • • {the inlet opening and the outlet opening of the pump being substantially coplanar}	16/18	• • using sliding {or pivoting} handle or pedal, i.e. the motive force being transmitted to a propelling means by means of a lever operated by the hand or foot of the occupant
11/103	• • • having means to increase efficiency of propulsive fluid, e.g. discharge pipe provided with means to improve the fluid flow	2016/185	• • • {comprising means for transforming oscillating movement into rotary movement, e.g. for driving propeller shafts}
11/107	• • • Direction control of propulsive fluid { (B63H 11/101 takes precedence) }	16/20	• • using rotary cranking arm
11/11	• • • • with bucket or clamshell-type reversing means	2016/202	• • • {specially adapted or arranged for being actuated by the feet of the user, e.g. using bicycle-like pedals}
11/113	• • • • Pivoted outlet	2016/205	• • • • {making use of standard bicycles}
11/117	• • • • Pivoted vane	2016/207	• • • • • {without wheels}
11/12	• the propulsive medium being steam or other gas	19/00	Marine propulsion not otherwise provided for
11/14	• • the gas being produced by combustion		
11/16	• • the gas being produced by other chemical processes		
13/00	Marine propulsion by wind motors driving water-engaging propulsive elements		
15/00	Marine propulsion by use of vessel-mounted driving mechanisms co-operating with anchored chains or the like		
16/00	Marine propulsion by muscle power		
2016/005	• {used on vessels dynamically supported, or lifted out of the water by hydrofoils}		
16/02	• Movable thwarts; Footrests		
16/04	• Oars; Sculls; Paddles; Poles		
2016/043	• • {Stop sleeves or collars for positioning oars in rowlocks, e.g. adjustable}		

19/02	<ul style="list-style-type: none"> by using energy derived from movement of ambient water, e.g. from rolling or pitching of vessels 	2020/006	<ul style="list-style-type: none"> {of coaxial type, e.g. of counter-rotative type}
19/04	<ul style="list-style-type: none"> propelled by water current 		
19/06	<ul style="list-style-type: none"> by discharging gas into ambient water 		
19/08	<ul style="list-style-type: none"> by direct engagement with water-bed or ground 		
20/00	Outboard propulsion units, e.g. outboard motors or Z-drives; Arrangements thereof on vessels		
	WARNING Group B63H 20/00 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.		WARNING Group B63H 2020/006 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.
20/001	<ul style="list-style-type: none"> {Arrangements, apparatus and methods for handling fluids used in outboard drives (for handling exhaust gas B63H 20/24; for handling cooling-water B63H 20/28; cooling outboard marine engines F01P 3/202; air intakes for outboard marine engines F02M 35/167)} 	20/007	<ul style="list-style-type: none"> {Trolling propulsion units (trolling plates for slowing down B63H 25/50; dynamo-electric machines of trolling units H02K)}
	WARNING Group B63H 20/001 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.		WARNING Group B63H 20/007 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.
20/002	<ul style="list-style-type: none"> {for handling lubrication liquids (in engines, e.g. outboard marine engines, F01M)} 	2020/008	<ul style="list-style-type: none"> {Tools, specially adapted for maintenance, mounting, repair, or the like of outboard propulsion units, e.g. of outboard motors or Z-drives}
	WARNING Group B63H 20/002 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.		WARNING Group B63H 2020/008 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.
2020/003	<ul style="list-style-type: none"> {Arrangements of two, or more outboard propulsion units} 	20/02	<ul style="list-style-type: none"> Mounting of propulsion units (B63H 20/08 takes precedence)
	WARNING Group B63H 2020/003 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.		WARNING Group B63H 20/02 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.
2020/005	<ul style="list-style-type: none"> {Arrangements of two or more propellers, or the like on single outboard propulsion units} 	2020/025	<ul style="list-style-type: none"> {Sealings specially adapted for mountings of outboard drive units; Arrangements thereof, e.g. for transom penetrations}
	WARNING Group B63H 2020/005 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.		WARNING Group B63H 2020/025 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.
		20/04	<ul style="list-style-type: none"> in a well
			WARNING Group B63H 20/04 is incomplete pending reclassification of documents from groups B63H 21/26 , B63H 21/265 , and B63H 21/28 . All groups listed in this Warning should be considered in order to perform a complete search.

20/06	<ul style="list-style-type: none"> on an intermediate support <p>WARNING</p> <p>Group B63H 20/06 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	20/12	<ul style="list-style-type: none"> Means enabling steering <p>WARNING</p> <p>Group B63H 20/12 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
20/08	<ul style="list-style-type: none"> Means enabling movement of the position of the propulsion element, e.g. for trim, tilt or steering; Control of trim or tilt (initiating means for steering B63H 25/02) <p>WARNING</p> <p>Group B63H 20/08 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	20/14	<ul style="list-style-type: none"> Transmission between propulsion power unit and propulsion element <p>WARNING</p> <p>Group B63H 20/14 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
20/10	<ul style="list-style-type: none"> Means enabling trim or tilt, or lifting of the propulsion element when an obstruction is hit; Control of trim or tilt <p>WARNING</p> <p>Group B63H 20/10 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	2020/145	<ul style="list-style-type: none"> {comprising means for permitting telescoping movement of components of the outboard propulsion unit, e.g. telescoping movement of power leg} <p>WARNING</p> <p>Group B63H 2020/145 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
2020/103	<ul style="list-style-type: none"> {using a flexible member for enabling or controlling tilt or lifting, e.g. a cable} <p>WARNING</p> <p>Group B63H 2020/103 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	20/16	<ul style="list-style-type: none"> allowing movement of the propulsion element in a horizontal plane only, e.g. for steering <p>WARNING</p> <p>Group B63H 20/16 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
20/106	<ul style="list-style-type: none"> {Means enabling lifting of the propulsion element in a substantially vertical, linearly sliding movement} <p>WARNING</p> <p>Group B63H 20/106 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	20/18	<ul style="list-style-type: none"> allowing movement of the propulsion element about a longitudinal axis, e.g. the through transom shaft (B63H 20/22 takes precedence) <p>WARNING</p> <p>Group B63H 20/18 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
		20/20	<ul style="list-style-type: none"> with provision for reverse drive <p>WARNING</p> <p>Group B63H 20/20 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>

- 20/22 . . allowing movement of the propulsion element about at least a horizontal axis without disconnection of the drive, e.g. using universal joints
- WARNING**
- Group [B63H 20/22](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/24 . {Arrangements, apparatus and methods for handling exhaust gas in outboard drives, e.g.} exhaust gas outlets {(in engines, e.g. outboard marine engines, [F01N](#))}
- WARNING**
- Group [B63H 20/24](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/245 . . {Exhaust gas outlets ([B63H 20/26](#) takes precedence)}
- WARNING**
- Group [B63H 20/245](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/26 . . {Exhaust gas outlets} passing through the propeller or its hub
- WARNING**
- Group [B63H 20/26](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/28 . {Arrangements, apparatus and methods for handling cooling-water in outboard drives, e.g.} cooling-water intakes {(cooling circuits for outboard marine engines [F01P 3/202](#))}
- WARNING**
- Group [B63H 20/28](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/285 . . {Cooling-water intakes ([B63H 20/28](#) takes precedence)}
- WARNING**
- Group [B63H 20/285](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/30 . . {Cooling-water intakes} for flushing {(circuits for flushing outboard marine engines [F01P 3/205](#))}
- WARNING**
- Group [B63H 20/30](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/32 . Housings {(air intakes for outboard engines [F02M 35/167](#))}
- WARNING**
- Group [B63H 20/32](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 2020/323 . . {Gear cases}
- WARNING**
- Group [B63H 2020/323](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 2020/326 . . . {having a dividing plane substantially in plane with the axes of the transmission shafts}
- WARNING**
- Group [B63H 2020/326](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.

- 20/34 . . comprising stabilising fins {, foils, anticavitation plates, splash plates, or rudders (rudders carrying propellers [B63H 25/42](#); rudders carrying jets [B63H 25/46](#))}
- WARNING**
- Group [B63H 20/34](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 20/36 . Transporting or testing stands {(hand carts for transporting outboard units [B62B](#); measuring torque [G01L 3/00](#), measuring thrust of propellers [G01L 5/133](#), testing in general [G01M](#)); Use of outboard propulsion units as pumps}; Protection of power legs {, e.g. when not in use}
- WARNING**
- Group [B63H 20/36](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 21/00 Use of propulsion power plant or units on vessels**
- 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
- 2021/003 . {the power plant using fuel cells for energy supply or accumulation, e.g. for buffering photovoltaic energy}
- 2021/006 . {the vessel being driven by hot gas positive-displacement engine plants of closed-cycle type, e.g. Stirling engines}
- 21/02 . the vessels being steam-driven ([B63H 21/18](#) takes precedence)
- 21/04 . . relating to positive-displacement steam engines
- 21/06 . . relating to steam turbines
- 21/08 . . relating to steam boilers
- 21/10 . . relating to condensers or engine-cooling fluid heat-exchangers
- 21/12 . the vessels being motor-driven ([B63H 21/175](#), [B63H 21/18](#) take precedence; {cooling circuits with liquid-to-liquid heat-exchange relative to marine vessels [F01P 3/207](#)})
- WARNING**
- Group [B63H 21/12](#) is no longer used for classification of vessels being motor-driven by electric motor, powered by land vehicle supported by vessel, and powered by nuclear energy. These documents are in the process of being reorganised to groups [B63H 21/17](#), [B63H 21/175](#), and [B63H 21/18](#) respectively
- 21/14 . . relating to internal-combustion engines {(of outboard type [B63H 20/00](#))}
- 21/16 . . relating to gas turbines
- 21/165 . . by hydraulic fluid motor, i.e. wherein a liquid under pressure is utilised to rotate the propelling means {(transmission from power plant or unit to propeller using fluid gearing [per se B63H 23/26](#))}
- 21/17 . . by electric motor
- 2021/171 . . . {making use of photovoltaic energy conversion, e.g. using solar panels}
- 2021/173 . . . {making use of superconductivity}
- 21/175 . the vessel being powered by land vehicle supported by vessel
- 21/18 . the vessels being powered by nuclear energy
- 21/20 . the vessels being powered by combinations of different types of propulsion units
- 2021/202 . . {of hybrid electric type}
- 2021/205 . . . {the second power unit being of the internal combustion engine type, or the like, e.g. a Diesel engine}
- 2021/207 . . . {the second power unit being a gas turbine}
- 21/21 . Control means for engine or transmission, specially adapted for use on marine vessels
- 21/213 . . {Levers or the like for controlling the engine or the transmission, e.g. single hand control levers}
- 2021/216 . . {using electric control means}
- 21/22 . the propulsion power units being controlled from exterior of engine room, e.g. from navigation bridge; Arrangements of order telegraphs
- 21/24 . {the vessels being small craft, e.g. racing boats}
- 21/26 . . {of outboard type; Outboard propulsion power units movably installed for steering, reversing, tilting, or the like (transom panels for outboard motors for inflatable boats [B63B 7/087](#); floating propeller units [B63B 35/665](#))}
- WARNING**
- Group [B63H 21/26](#) is no longer used for the classification of documents as of May 1, 2020.
- The content of this group is being reclassified into groups [B63H 5/125](#), [B63H 5/1252](#), [B63H 2005/1254](#), [B63H 2005/1256](#), [B63H 2005/1258](#), [B63H 20/00](#), [B63H 20/001](#), [B63H 20/002](#), [B63H 2020/003](#), [B63H 2020/005](#), [B63H 2020/006](#), [B63H 20/007](#), [B63H 2020/008](#), [B63H 20/02](#), [B63H 2020/025](#), [B63H 20/04](#), [B63H 20/06](#), [B63H 20/08](#), [B63H 20/10](#), [B63H 2020/103](#), [B63H 20/106](#), [B63H 20/12](#), [B63H 20/14](#), [B63H 2020/145](#), [B63H 20/16](#), [B63H 20/18](#), [B63H 20/20](#), [B63H 20/22](#), [B63H 20/24](#), [B63H 20/245](#), [B63H 20/26](#), [B63H 20/28](#), [B63H 20/285](#), [B63H 20/30](#), [B63H 20/32](#), [B63H 2020/323](#), [B63H 2020/326](#), [B63H 20/34](#), [B63H 20/36](#), [B63H 25/42](#), and [B63H 2025/425](#).
- All groups listed in this Warning should be considered in order to perform a complete search.

- 21/265 . . . {Steering or control devices for outboards
(Frozen) (steering by rudders [B63H 25/06](#); control
handles for boats [B63H 21/213](#))}

WARNING

Group [B63H 21/265](#) is no longer used for the classification of documents as of May 1, 2020.

The content of this group is being reclassified into groups [B63H 5/125](#), [B63H 5/1252](#), [B63H 2005/1254](#), [B63H 2005/1256](#), [B63H 2005/1258](#), [B63H 20/00](#), [B63H 20/001](#), [B63H 20/002](#), [B63H 20/003](#), [B63H 20/005](#), [B63H 20/006](#), [B63H 20/007](#), [B63H 20/008](#), [B63H 20/02](#), [B63H 20/025](#), [B63H 20/04](#), [B63H 20/06](#), [B63H 20/08](#), [B63H 20/10](#), [B63H 20/103](#), [B63H 20/106](#), [B63H 20/12](#), [B63H 20/14](#), [B63H 20/145](#), [B63H 20/16](#), [B63H 20/18](#), [B63H 20/20](#), [B63H 20/22](#), [B63H 20/24](#), [B63H 20/245](#), [B63H 20/26](#), [B63H 20/28](#), [B63H 20/285](#), [B63H 20/30](#), [B63H 20/32](#), [B63H 20/323](#), [B63H 20/326](#), [B63H 20/34](#), [B63H 20/36](#), [B63H 25/42](#), and [B63H 2025/425](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 21/28 . . . {Arrangements of transmission between
(Frozen) propulsion power unit and propulsive element}

WARNING

Group [B63H 21/28](#) is no longer used for the classification of documents as of May 1, 2020.

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All groups listed in this Warning should be considered in order to perform a complete search.

- 21/30 . . . Mounting of propulsion plant or unit, e.g. for anti-vibration purposes ([hull reinforcements therefor](#) [B63B 3/70](#))
- 21/302 . . . {with active vibration damping}
- 21/305 . . . {with passive vibration damping}

- 2021/307 . . . {Arrangements, or mountings of propulsion power plant elements in modular propulsion power units, e.g. using containers}

- 21/32 . . . Arrangements of propulsion power-unit exhaust uptakes; Funnel peculiar to vessels
- 21/34 . . . having exhaust-gas deflecting means
- 21/36 . . . Covers or casing arranged to protect plant or unit from marine environment
- 21/38 . . . 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 ({in outboard drives [B63H 20/001](#); } lubricating or cooling machines or engines in general [F01 - F04](#))
- 21/383 . . . {for handling cooling-water (in outboard drives [B63H 20/28](#); in machines or engines in general [F01P 3/00](#))}
- 21/386 . . . {for handling lubrication liquids (in machines or engines in general [F01M](#))}

- 23/00 Transmitting power from propulsion power plant to propulsive elements** (adaptation of transmission to allow adjustment in direction of propellers [B63H 5/125](#); transmission between wind motors and propulsive elements [B63H 13/00](#); in outboard propulsion units [B63H 20/14](#); adaptation of transmission to allow adjustment of location of propellers [B63H 20/08](#))

- 2023/005 . . . {using a drive acting on the periphery of a rotating propulsive element, e.g. on a dented circumferential ring on a propeller, or a propeller acting as rotor of an electric motor}

- 23/02 . . . with mechanical gearing

- 2023/0208 . . . {by means of endless flexible members}

- 2023/0216 {by means of belts, or the like}

- 2023/0225 {of grooved belts, i.e. with one or more grooves in longitudinal direction of the belt}

- 2023/0233 {of belts having a toothed contact surface, or regularly spaced bosses, or hollows for slip-less or nearly slip-less meshing with complementary profiled contact surface of a pulley}

- 2023/0241 {of V-belts, i.e. belts of tapered cross section}

- 2023/025 {by means of chains}

- 2023/0258 . . . {comprising gearings with variable gear ratio, other than reversing drives or trolling drives}

- 2023/0266 {comprising gearings with automatically variable gear ratio, other than continuously variable transmissions or trolling drives}

- 2023/0275 {comprising means for conveying rotary motion with continuously variable gear ratio, e.g. continuously variable transmissions using endless flexible members}

- 2023/0283 . . . {using gears having orbital motion}

- 2023/0291 . . . {Trolling gears, i.e. mechanical power transmissions comprising controlled slip clutches, e.g. for low speed propulsion}

- 23/04 . . . the main transmitting element, e.g. shaft, being substantially vertical

- 23/06 . . . for transmitting drive from a single propulsion power unit

- 2023/062 {comprising means for simultaneously driving two or more main transmitting elements, e.g. drive shafts}

2023/065	. . . . {having means for differentially varying the speed of the main transmitting elements, e.g. of the drive shafts}	25/00	Steering; Slowing-down otherwise than by use of propulsive elements (using movably-installed outboard propulsion units B63H 20/00); Dynamic anchoring, i.e. positioning vessels by means of main or auxiliary propulsive elements
2023/067	. . . . {the elements being formed by two or more coaxial shafts, e.g. counter-rotating shafts}	2025/005	. {Steering specially adapted for towing trains, tug-barge systems, or the like; Equipment or accessories therefor}
23/08	. . with provision for reversing drive	25/02	. Initiating means for steering {, for slowing down, otherwise than by use of propulsive elements, or for dynamic anchoring}
23/10	. . for transmitting drive from more than one propulsion power unit	2025/022	. . {Steering wheels; Posts for steering wheels}
23/12	. . . allowing combined use of the propulsion power units	2025/024	. . {Handle-bars; Posts for supporting handle-bars, e.g. adjustable posts}
23/14	. . . . with unidirectional drive or where reversal is immaterial	2025/026	. . {using multi-axis control levers, or the like, e.g. joysticks, wherein at least one degree of freedom is employed for steering, slowing down, or dynamic anchoring}
23/16	. . . . characterised by provision of reverse drive	2025/028	. . {using remote control means, e.g. wireless control; Equipment or accessories therefor}
23/18	. . . for alternative use of the propulsion power units	25/04	. . automatic, e.g. reacting to compass
23/20	. . . . with separate forward and astern propulsion power units, e.g. turbines	2025/045	. . . {making use of satellite radio beacon positioning systems, e.g. the Global Positioning System [GPS]}
23/22	. with non-mechanical gearing	25/06	. Steering by rudders (by rudders carrying propellers B63H 25/42)
23/24	. . electric {(dynamo-electric machines H02K)}	2025/063	. . {Arrangements of rudders forward of the propeller position, e.g. of backing rudders; Arrangements of rudders on the forebody of the hull; Steering gear therefor}
2023/245	. . . {with two or more electric motors directly acting on a single drive shaft, e.g. plurality of electric rotors mounted on one common shaft, or plurality of electric motors arranged coaxially one behind the other with rotor shafts coupled together}	2025/066	. . {Arrangements of two or more rudders; Steering gear therefor}
23/26	. . fluid	25/08	. . Steering gear
23/28	. with synchronisation of propulsive elements	25/10	. . . with mechanical transmission
23/30	. characterised by use of clutches	25/12	. . . with fluid transmission
2023/305	. . {using fluid or semifluid as power transmitting means}	25/14	. . . power assisted; power driven, i.e. using steering engine
23/32	. Other parts	25/16	. . . . with alternative muscle or power operated steering
23/321	. . {Bearings or seals specially adapted for propeller shafts}	25/18	. . . . Transmitting of movement of initiating means to steering engine
2023/322	. . . {Intermediate propeller shaft bearings, e.g. with provisions for shaft alignment}	25/20	. . . . . by mechanical means
2023/323	. . . {Bearings for coaxial propeller shafts, e.g. for driving propellers of the counter-rotative type}	25/22	. . . . . by fluid means
2023/325	. . . {Thrust bearings, i.e. axial bearings for propeller shafts}	25/24	. . . . . by electrical means
23/326	. . . {Water lubricated bearings}	25/26	. . . . . Steering engines
2023/327	. . . {Sealings specially adapted for propeller shafts or stern tubes}	25/28	. . . . . of fluid type
2023/328	. . {Marine transmissions characterised by the use of brakes, other than propeller shaft brakes; Brakes therefor}	25/30	. . . . . hydraulic
23/34	. . Propeller shafts; Paddle-wheel shafts; Attachment of propellers on shafts	25/32	. . . . . steam
2023/342	. . . {comprising couplings, e.g. resilient couplings; Couplings therefor}	25/34	. . . . . Transmitting of movement of engine to rudder, e.g. using quadrants, brakes
2023/344	. . . {comprising flexible shafts members}	25/36	. . Rudder-position indicators
2023/346	. . . {comprising hollow shaft members}	25/38	. . Rudders
2023/348	. . . {with turning or inching gear, i.e. with means for slowly rotating, or for angularly positioning of shafts or propulsive elements mounted thereon}	25/381	. . . {with flaps}
23/35	. . . Shaft braking or locking, i.e. means to slow or stop the rotation of the propeller shaft or to prevent the shaft from initial rotation	25/382	. . . {movable otherwise than for steering purposes; Changing geometry}
23/36	. . Shaft tubes	25/383	. . . . {with deflecting means able to reverse the water stream direction}
		2025/384	. . . . {with means for retracting or lifting}
		2025/385	. . . . . {by pivoting}
		2025/386	. . . . . {by sliding, e.g. telescopic}
		2025/387	. . . . . {comprising two or more rigidly interconnected mutually spaced blades pivotable about a common rudder shaft, e.g. parallel twin blades mounted on a pivotable supporting frame}

- 2025/388 . . . {with varying angle of attack over the height of the rudder blade, e.g. twisted rudders}
- 25/40 . . . using Magnus effect
- 25/42 . Steering or dynamic anchoring by propulsive elements (by jets [B63H 25/46](#)); Steering or dynamic anchoring by propellers used therefor only; Steering or dynamic anchoring by rudders carrying propellers

WARNING

Group [B63H 25/42](#) is incomplete pending reclassification of documents from groups [B63H 21/26](#), [B63H 21/265](#), and [B63H 21/28](#).

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- 2025/425 . . {Propulsive elements, other than jets, substantially used for steering or dynamic anchoring only, with means for retracting, or otherwise moving to a rest position outside the water flow around the hull}

WARNING

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- 25/44 . Steering or slowing-down by extensible flaps or the like
- 25/46 . Steering or dynamic anchoring by jets {or by rudders carrying jets (steering or dynamic anchoring by deflecting or directing main propulsion jets [B63H 11/00](#))}
- 2025/465 . . {Jets or thrusters substantially used for steering or dynamic anchoring only, with means for retracting, or otherwise moving to a rest position outside the water flow around the hull}
- 25/48 . Steering or slowing-down by deflection of propeller slipstream otherwise than by rudder
- 25/50 . Slowing-down means not otherwise provided for
- 25/52 . Parts for steering not otherwise provided for