

# 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.

<b>1/00</b>	<b>Propulsive elements directly acting on water (jet propulsion <a href="#">B63H 11/00</a>)</b>	<b>2001/185</b>	. . . . . {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}
<b>2001/005</b>	. {using Magnus effect}		
1/02	. of rotary type		
1/04	. . with rotation axis substantially at right angles to propulsive direction		
<b>2001/045</b>	. . . {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
<b>2001/105</b>	. . . . . {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
<b>2001/122</b>	. . . {Single or multiple threaded helicoidal screws, or the like, comprising foils extending over a substantial angle; Archimedean screws}	<b>2001/283</b>	. . . . . {Propeller hub caps with fins having a pitch different from pitch of propeller blades, or a helix hand opposed to the propellers' helix hand}
<b>2001/125</b>	. . . . {with helicoidal foils projecting from outside surfaces of floating rotatable bodies, e.g. rotatable, cylindrical bodies}	<b>2001/286</b>	. . . . . {Injection of gas into fluid flow to propellers, or around propeller blades}
<b>2001/127</b>	. . . . {with helicoidal foils projecting from inside surfaces of rotating shrouds; Archimedean screws}	1/30	. of non-rotary type
1/14	. . . Propellers ( <a href="#">pitch changing B63H 3/00</a> )	1/32	. . Flaps, pistons, or the like, reciprocating in propulsive direction
<b>2001/145</b>	. . . . {comprising blades of two or more different types, e.g. different lengths}	1/34	. . of endless-track type
1/15	. . . . having vibration damping means	<b>2001/342</b>	. . . {with tracks substantially parallel to propulsive direction}
1/16	. . . . having a shrouding ring attached to blades	<b>2001/344</b>	. . . . {having paddles mounted in fixed relation to tracks, or to track members}
<b>2001/165</b>	. . . . . {Hubless propellers, e.g. peripherally driven shrouds with blades projecting from the shrouds' inside surfaces}	<b>2001/346</b>	. . . . {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	<b>2001/348</b>	. . . {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	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)
<b>3/00</b>	<b>Propeller-blade pitch changing</b> {(aircraft propellers B64C 11/30; rotors of turbines F01D 7/00; axial wind motors F03D 7/022; axial-flow pumps F04D 29/00)}	<b>WARNING</b>	
3/002	{with individually adjustable blades}	Group B63H 5/125 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.	
2003/004	{comprising means for locking blades in position}	All groups listed in this Warning should be considered in order to perform a complete search.	
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)}	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}
3/04	. . the control element being reciprocable	<b>WARNING</b>	
3/06	characterised by use of non-mechanical actuating means, e.g. electrical (B63H 3/002 takes precedence)	Group B63H 5/1252 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.	
3/08	. . fluid	All groups listed in this Warning should be considered in order to perform a complete search.	
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}	2005/1254	{Podded azimuthing thrusters, i.e. podded thruster units arranged inboard for rotation about vertical axis}
2003/088	. . . {characterised by supply of fluid actuating medium to control element, e.g. of hydraulic fluid to actuator co-rotating with the propeller}	<b>WARNING</b>	
3/10	characterised by having pitch control conjoint with propulsion plant control	Group B63H 2005/1254 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.	
3/12	the pitch being adjustable only when propeller is stationary (B63H 3/002 takes precedence)	All groups listed in this Warning should be considered in order to perform a complete search.	
<b>5/00</b>	<b>Arrangements on vessels of propulsion elements directly acting on water</b>	2005/1256	. . . . {with mechanical power transmission to propellers}
2005/005	{Front propulsors, i.e. propellers, paddle wheels, or the like substantially arranged ahead of the vessels' midship section}	<b>WARNING</b>	
5/02	of paddle wheels, e.g. of stern wheels	Group B63H 2005/1256 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.	
2005/025	. . {of Voith Schneider type}	All groups listed in this Warning should be considered in order to perform a complete search.	
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)	2005/1258	. . . . {with electric power transmission to propellers, i.e. with integrated electric propeller motors}
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}	<b>WARNING</b>	
5/08	. . of more than one propeller	Group B63H 2005/1258 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.	
5/10	. . . of coaxial type, e.g. of counter-rotative type	All groups listed in this Warning should be considered in order to perform a complete search.	
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}		

- 5/14 . . 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}	<b>WARNING</b> 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 <a href="#">B63H 16/16</a> - <a href="#">B63H 16/20</a>	
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	<b>WARNING</b> 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 <a href="#">B63H 16/16</a> - <a href="#">B63H 16/20</a>	
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 { <a href="#">(B63H 11/101 takes precedence)</a> }	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	<b>Marine propulsion not otherwise provided for</b>
11/14	• • the gas being produced by combustion		
11/16	• • the gas being produced by other chemical processes		
13/00	<b>Marine propulsion by wind motors driving water-engaging propulsive elements</b>		
15/00	<b>Marine propulsion by use of vessel-mounted driving mechanisms co-operating with anchored chains or the like</b>		
16/00	<b>Marine propulsion by muscle power</b>		
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	• by using energy derived from movement of ambient water, e.g. from rolling or pitching of vessels	2020/006	• • {of coaxial type, e.g. of counter-rotative type}
19/04	• • propelled by water current		<b>WARNING</b>
19/06	• by discharging gas into ambient water		Group <a href="#">B63H 2020/006</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
19/08	• by direct engagement with water-bed or ground		All groups listed in this Warning should be considered in order to perform a complete search.
<b>20/00</b>	<b>Outboard propulsion units, e.g. outboard motors or Z-drives; Arrangements thereof on vessels</b>		
	<b>WARNING</b>		
	Group <a href="#">B63H 20/00</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .	20/007	• {Trolling propulsion units (trolling plates for slowing down <a href="#">B63H 25/50</a> ; dynamo-electric machines of trolling units <a href="#">H02K</a> )}
	All groups listed in this Warning should be considered in order to perform a complete search.		<b>WARNING</b>
20/001	• {Arrangements, apparatus and methods for handling fluids used in outboard drives (for handling exhaust gas <a href="#">B63H 20/24</a> ; for handling cooling-water <a href="#">B63H 20/28</a> ; cooling outboard marine engines <a href="#">F01P 3/202</a> ; air intakes for outboard marine engines <a href="#">F02M 35/167</a> )}		Group <a href="#">B63H 20/007</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
	<b>WARNING</b>		All groups listed in this Warning should be considered in order to perform a complete search.
	Group <a href="#">B63H 20/001</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .	2020/008	• {Tools, specially adapted for maintenance, mounting, repair, or the like of outboard propulsion units, e.g. of outboard motors or Z-drives}
	All groups listed in this Warning should be considered in order to perform a complete search.		<b>WARNING</b>
20/002	• • {for handling lubrication liquids (in engines, e.g. outboard marine engines, <a href="#">F01M</a> )}		Group <a href="#">B63H 2020/008</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
	<b>WARNING</b>		All groups listed in this Warning should be considered in order to perform a complete search.
	Group <a href="#">B63H 20/002</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .	20/02	• Mounting of propulsion units ( <a href="#">B63H 20/08</a> takes precedence)
	All groups listed in this Warning should be considered in order to perform a complete search.		<b>WARNING</b>
2020/003	• {Arrangements of two, or more outboard propulsion units}		Group <a href="#">B63H 20/02</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
	<b>WARNING</b>		All groups listed in this Warning should be considered in order to perform a complete search.
	Group <a href="#">B63H 2020/003</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .	2020/025	• • {Sealings specially adapted for mountings of outboard drive units; Arrangements thereof, e.g. for transom penetrations}
	All groups listed in this Warning should be considered in order to perform a complete search.		<b>WARNING</b>
2020/005	• {Arrangements of two or more propellers, or the like on single outboard propulsion units}		Group <a href="#">B63H 2020/025</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
	<b>WARNING</b>		All groups listed in this Warning should be considered in order to perform a complete search.
	Group <a href="#">B63H 2020/005</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .	20/04	• • in a well
	All groups listed in this Warning should be considered in order to perform a complete search.		<b>WARNING</b>
			Group <a href="#">B63H 20/04</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a> , <a href="#">B63H 21/265</a> , and <a href="#">B63H 21/28</a> .
			All groups listed in this Warning should be considered in order to perform a complete search.

20/06	<ul style="list-style-type: none"> <li>on an intermediate support</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/06</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>Means enabling steering</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/12</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>Means enabling movement of the position of the propulsion element, e.g. for trim, tilt or steering; Control of trim or tilt (<a href="#">initiating means for steering B63H 25/02</a>)</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/08</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>Transmission between propulsion power unit and propulsion element</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/14</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>Means enabling trim or tilt, or lifting of the propulsion element when an obstruction is hit; Control of trim or tilt</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/10</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>{<a href="#">comprising means for permitting telescoping movement of components of the outboard propulsion unit, e.g. telescoping movement of power leg</a>}</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 2020/145</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>{<a href="#">using a flexible member for enabling or controlling tilt or lifting, e.g. a cable</a>}</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 2020/103</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>allowing movement of the propulsion element in a horizontal plane only, e.g. for steering</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/16</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>{<a href="#">Means enabling lifting of the propulsion element in a substantially vertical, linearly sliding movement</a>}</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/106</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>allowing movement of the propulsion element about a longitudinal axis, e.g. the through transom shaft (<a href="#">B63H 20/22 takes precedence</a>)</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/18</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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"> <li>with provision for reverse drive</li> </ul> <p><b><u>WARNING</u></b></p> <p>Group <a href="#">B63H 20/20</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</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	<ul style="list-style-type: none"> <li>comprising stabilising fins {, foils, anticavitation plates, splash plates, or rudders (rudders carrying propellers <a href="#">B63H 25/42</a>; rudders carrying jets <a href="#">B63H 25/46</a>)}</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">B63H 20/34</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	21/165	<ul style="list-style-type: none"> <li>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 <a href="#">per se B63H 23/26</a>)}</li> </ul>
		21/17	<ul style="list-style-type: none"> <li>by electric motor</li> </ul>
		2021/171	<ul style="list-style-type: none"> <li>{making use of photovoltaic energy conversion, e.g. using solar panels}</li> </ul>
		2021/173	<ul style="list-style-type: none"> <li>{making use of superconductivity}</li> </ul>
		21/175	<ul style="list-style-type: none"> <li>the vessel being powered by land vehicle supported by vessel</li> </ul>
		21/18	<ul style="list-style-type: none"> <li>the vessels being powered by nuclear energy</li> </ul>
		21/20	<ul style="list-style-type: none"> <li>the vessels being powered by combinations of different types of propulsion units</li> </ul>
		2021/202	<ul style="list-style-type: none"> <li>{of hybrid electric type}</li> </ul>
		2021/205	<ul style="list-style-type: none"> <li>{the second power unit being of the internal combustion engine type, or the like, e.g. a Diesel engine}</li> </ul>
		2021/207	<ul style="list-style-type: none"> <li>{the second power unit being a gas turbine}</li> </ul>
		21/21	<ul style="list-style-type: none"> <li>Control means for engine or transmission, specially adapted for use on marine vessels</li> </ul>
		21/213	<ul style="list-style-type: none"> <li>{Levers or the like for controlling the engine or the transmission, e.g. single hand control levers}</li> </ul>
		2021/216	<ul style="list-style-type: none"> <li>{using electric control means}</li> </ul>
		21/22	<ul style="list-style-type: none"> <li>the propulsion power units being controlled from exterior of engine room, e.g. from navigation bridge; Arrangements of order telegraphs</li> </ul>
		21/24	<ul style="list-style-type: none"> <li>{the vessels being small craft, e.g. racing boats}</li> </ul>
		21/26 (Frozen)	<ul style="list-style-type: none"> <li>{of outboard type; Outboard propulsion power units movably installed for steering, reversing, tilting, or the like (transom panels for outboard motors for inflatable boats <a href="#">B63B 7/087</a>; floating propeller units <a href="#">B63B 35/665</a>)}</li> </ul>
			<b>WARNING</b>
			<p>Group <a href="#">B63H 21/26</a> is no longer used for the classification of documents as of May 1, 2020.</p> <p>The content of this group is being reclassified into groups <a href="#">B63H 5/125</a>, <a href="#">B63H 5/1252</a>, <a href="#">B63H 2005/1254</a>, <a href="#">B63H 2005/1256</a>, <a href="#">B63H 2005/1258</a>, <a href="#">B63H 20/00</a>, <a href="#">B63H 20/001</a>, <a href="#">B63H 20/002</a>, <a href="#">B63H 2020/003</a>, <a href="#">B63H 2020/005</a>, <a href="#">B63H 2020/006</a>, <a href="#">B63H 20/007</a>, <a href="#">B63H 2020/008</a>, <a href="#">B63H 20/02</a>, <a href="#">B63H 2020/025</a>, <a href="#">B63H 20/04</a>, <a href="#">B63H 20/06</a>, <a href="#">B63H 20/08</a>, <a href="#">B63H 20/10</a>, <a href="#">B63H 2020/103</a>, <a href="#">B63H 20/106</a>, <a href="#">B63H 20/12</a>, <a href="#">B63H 20/14</a>, <a href="#">B63H 2020/145</a>, <a href="#">B63H 20/16</a>, <a href="#">B63H 20/18</a>, <a href="#">B63H 20/20</a>, <a href="#">B63H 20/22</a>, <a href="#">B63H 20/24</a>, <a href="#">B63H 20/245</a>, <a href="#">B63H 20/26</a>, <a href="#">B63H 20/28</a>, <a href="#">B63H 20/285</a>, <a href="#">B63H 20/30</a>, <a href="#">B63H 20/32</a>, <a href="#">B63H 2020/323</a>, <a href="#">B63H 2020/326</a>, <a href="#">B63H 20/34</a>, <a href="#">B63H 20/36</a>, <a href="#">B63H 25/42</a>, and <a href="#">B63H 2025/425</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
20/36	<ul style="list-style-type: none"> <li>Transporting or testing stands {(hand carts for transporting outboard units <a href="#">B62B</a>; measuring torque <a href="#">G01L 3/00</a>, measuring thrust of propellers <a href="#">G01L 5/133</a>, testing in general <a href="#">G01M</a>); Use of outboard propulsion units as pumps}; Protection of power legs {, e.g. when not in use}</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">B63H 20/36</a> is incomplete pending reclassification of documents from groups <a href="#">B63H 21/26</a>, <a href="#">B63H 21/265</a>, and <a href="#">B63H 21/28</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>		
21/00	<p><b>Use of propulsion power plant or units on vessels</b></p> <p><b>NOTE</b></p> <p>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</p>		
2021/003	<ul style="list-style-type: none"> <li>{the power plant using fuel cells for energy supply or accumulation, e.g. for buffering photovoltaic energy}</li> </ul>		
2021/006	<ul style="list-style-type: none"> <li>{the vessel being driven by hot gas positive-displacement engine plants of closed-cycle type, e.g. Stirling engines}</li> </ul>		
21/02	<ul style="list-style-type: none"> <li>the vessels being steam-driven (<a href="#">B63H 21/18</a> takes precedence)</li> </ul>		
21/04	<ul style="list-style-type: none"> <li>relating to positive-displacement steam engines</li> </ul>		
21/06	<ul style="list-style-type: none"> <li>relating to steam turbines</li> </ul>		
21/08	<ul style="list-style-type: none"> <li>relating to steam boilers</li> </ul>		
21/10	<ul style="list-style-type: none"> <li>relating to condensers or engine-cooling fluid heat-exchangers</li> </ul>		
21/12	<ul style="list-style-type: none"> <li>the vessels being motor-driven (<a href="#">B63H 21/175</a>, <a href="#">B63H 21/18</a> take precedence; {cooling circuits with liquid-to-liquid heat-exchange relative to marine vessels <a href="#">F01P 3/207</a>)}</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">B63H 21/12</a> 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 <a href="#">B63H 21/17</a>, <a href="#">B63H 21/175</a>, and <a href="#">B63H 21/18</a> respectively</p>		
21/14	<ul style="list-style-type: none"> <li>relating to internal-combustion engines {(of outboard type <a href="#">B63H 20/00</a>)}</li> </ul>		
21/16	<ul style="list-style-type: none"> <li>relating to gas turbines</li> </ul>		

- 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.

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.

- 21/30 . . . 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	<b>Steering; Slowing-down otherwise than by use of propulsive elements (using movably-installed outboard propulsion units <a href="#">B63H 20/00</a>); Dynamic anchoring, i.e. positioning vessels by means of main or auxiliary propulsive elements</b>
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 <a href="#">B63H 25/42</a> )
23/24	. . electric {(dynamo-electric machines <a href="#">H02K</a> )}	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](#).

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

- 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**

Group [B63H 2025/425](#) 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.

- 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