COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

TRANSPORTING

B63 SHIPS OR OTHER WATERBORNE VESSELS; RELATED EQUIPMENT

B63G OFFENSIVE OR DEFENSIVE ARRANGEMENTS ON VESSELS; MINE-LAYING; MINE-SWEEPING; SUBMARINES; AIRCRAFT CARRIERS (means of attack or defence in general, e.g. turrets F41H)

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.

WARNINGS

1. 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.
2. Groups B63G 1/00 - B63G 2013/027 are incomplete pending reclassification of documents from groups B63B 2701/00 - B63B 2770/00.

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

1/00 Arrangements of guns or missile launchers; Vessels characterised thereby (submarines B63G 8/00; guns, missile launchers F41)

3/00 Arrangements of ammunition stores or handlers (specially for submarines B63G 8/00; feeding ammunition missiles or projectiles to guns in general F41A 9/00); Vessels characterised thereby (general cargo aspects B63B)

Vessels characterised thereby (submarines B63G 8/00; torpedo launching per se F41F)

3/02 for torpedoes
3/04 for missiles
3/06 for mines or depth charges

5/00 Vessels characterised by adaptation to torpedo launching (submarines B63G 8/00; torpedo launching per se F41F)

6/00 Laying of mines or depth charges; Vessels characterised thereby (arrangements on submarines for mine laying B63G 8/33)

7/00 Mine-sweeping; Vessels characterised thereby (unmanned autonomously operating mine sweeping vessels)

2007/005 . [Unmanned autonomously operating mine sweeping vessels]
7/02 . Mine-sweeping means, Means for destroying mines
7/04 . by means of cables
7/06 . of electromagnetic type
2007/065 . . . [by making use of superconductivity]
7/08 . . . of acoustic type

8/00 Underwater vessels, e.g. submarines; [Equipment specially adapted therefor] (submarine hulls B63B 3/13; diving chambers with mechanical link, e.g. cable, to a base B63C 11/34; divers' sleds B63C 11/46; torpedoes F42B 19/00)

8/001 . [Underwater vessels adapted for special purposes, e.g. unmanned, underwater vessels; Equipment specially adapted therefor, e.g. docking stations (self-propelled or direction controlled diving chambers with mechanical link to a base B63C 11/42)]
2008/002 . . [unmanned]
2008/004 . . . [autonomously operating]
2008/005 . . . [remotely controlled]
2008/007 . . . . [by means of a physical link to a base, e.g. wire, cable or umbilical]
2008/008 . . . . [Docking stations for unmanned underwater vessels, or the like]

8/04 . Superstructure
8/06 . Conning-towers
8/08 . Propulsion (schnorkels B63G 8/36; marine propulsion or steering in general B63H-); nuclear propulsion B63H 21/18; propulsion power plants or units per se F01 - F04); submerged exhausting apparatus F01N 13/12)
8/10 . . . using steam plant
2008/105 . . . [using Walter-type plants, i.e. power plants in which steam is generated in a reactor vessel by reaction between a fuel and an oxidant, e.g. hydrogen peroxide]
8/12 . . . using internal-combustion engines
8/14 . Control of attitude or depth (of torpedoes F42B 19/00)
8/16 . . by direct use of propellers or jets
8/18 . . by hydrofoils
8/20 . . Steering equipment (B63G 8/16, B63G 8/18 take precedence; steering of vessels in general B63H 25/00)
Adjustment of buoyancy by water ballasting; Emptying equipment for ballast tanks ([conduits for emptying or ballasting on vessels in general B63B 13/00;] stabilising vessels using ballast tanks B63B 43/06)

Automatic depth adjustment; Safety equipment for increasing buoyancy, e.g. detachable ballast, floating bodies

Trimming equipment

Arrangement of offensive or defensive equipment

of artillery or missile launching means

of torpedo-launching means (torpedo-launching means per se F41F 3/00); of torpedo stores or handlers

of mine-laying means (mine laying vessels other than submarines B63G 6/00)

Camouflage (for other vessels B63G 13/02; in general F41H 3/00)

Adaptations of ventilation [, e.g. schnorkels,] cooling, heating, or air-conditioning (reconditioning air in sealed chambers A62B 11/00; for vessels in general B63J 2/00; air-conditioning in general F24F)

Arrangement of visual or electronic watch equipment, e.g. of periscopes, of radar {(periscopes, optical aiming or sighting devices per se G02B 23/00)}

Arrangements of sonic watch equipment, e.g. low-frequency, sonar

Rescue equipment for personnel (life-saving in water, not specially adapted for submarine personnel B63C)

Towed underwater vessels

Capsules, chambers, water-tight boats or the like, detachable from the submarine

9/00 Other offensive or defensive arrangements on vessels against submarines, torpedoes, or mines

2009/005 . . . {of sonic watch equipment, e.g. low-frequency or sonar}

9/02 . Means for protecting vessels against torpedo attack (armoured hulls B63B 3/10)

9/04 . . . Nets or the like (net barriers for harbour defence F41H 11/00)

9/06 . for degaussing vessels (demagnetising in general H01F 13/00)

11/00 Aircraft carriers (other vessels or floating structures for aircraft B63B 35/50; launching or arresting gear for aircraft B64F)

13/00 Other offensive or defensive arrangements on vessels; Vessels characterised thereby

13/02 . Camouflage (for submarines B63G 8/34)

2013/022 . . . [using means for reducing noise emission into air or water]

2013/025 . . . [using means for reducing radiation emission of electromagnetic waves, e.g. infrared, into air or water]