

Title (en)
ICE-BREAKING SHIP

Publication
EP 0328720 B1 19920902 (DE)

Application
EP 88108794 A 19880527

Priority
DE 8802053 U 19880218

Abstract (en)
[origin: EP0328720A1] To improve the manoeuvrability of ships when sailing in ice-covered water both when sailing ahead and astern, the hull of an ice-breaking ship is provided with ice-breaking parts, such as reamers (30) or cutting edges, which are arranged on and project laterally from the ship's sides (21, 22) and preferably form the widest point of the underwater hull, in which arrangement the width of the underwater hull in the area of the ice-breaking parts of the ship, such as reamers (30) or cutting edges, can be removed entirely or partially during the operation of the ship by displacing or swinging the reamers (30) or cutting edges or parts of them out of the underwater area, as a result of which the underwater hull is designed in such a way that it can be reduced to a smaller width during the operation of the ship, preferably to the width of the part of the ship which adjoins the part of the ship carrying the reamers (30) or cutting edges. <IMAGE>

IPC 1-7
B63B 35/08; **B63B 35/12**

IPC 8 full level
B63B 35/12 (2006.01); **B63B 35/08** (2006.01)

CPC (source: EP KR US)
B63B 35/08 (2013.01 - EP US); **B63B 35/12** (2013.01 - KR)

Cited by
RU2731137C1; FR2671533A1; US5231944A; US5325803A; EP3085614A1; DE4290973T1; DE4290973B4; DE4290973B8

Designated contracting state (EPC)
BE DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0328720 A1 19890823; **EP 0328720 B1 19920902**; CA 1301559 C 19920526; CN 1028215 C 19950419; CN 1035468 A 19890913; DE 3874318 D1 19921008; DE 8802053 U1 19890615; FI 884246 A0 19880915; FI 884246 A 19890819; FI 93812 B 19950228; FI 93812 C 19950612; JP 2656340 B2 19970924; JP 2847035 B2 19990113; JP 2847036 B2 19990113; JP H01249587 A 19891004; JP H07237584 A 19950912; JP H07237585 A 19950912; KR 890012857 A 19890919; KR 940007216 B1 19940810; KR 940007217 B1 19940810; NO 172975 B 19930628; NO 172975 C 19931006; NO 883731 D0 19880819; NO 883731 L 19890821; PL 164206 B1 19940630; PL 164327 B1 19940729; PL 164405 B1 19940729; PL 277466 A1 19890904; RU 2053922 C1 19960210; SU 1762746 A3 19920915; US 4942837 A 19900724

DOCDB simple family (application)
EP 88108794 A 19880527; CA 588617 A 19890119; CN 89100855 A 19890217; DE 3874318 T 19880527; DE 8802053 U 19880218; FI 884246 A 19880915; JP 15414794 A 19940613; JP 15414894 A 19940613; JP 3639689 A 19890217; KR 890001872 A 19890217; KR 930012756 A 19930707; NO 883731 A 19880819; PL 27746689 A 19890130; PL 29515089 A 19890130; PL 29515189 A 19890130; SU 4356403 A 19880914; SU 4894850 A 19910329; US 30200689 A 19890126