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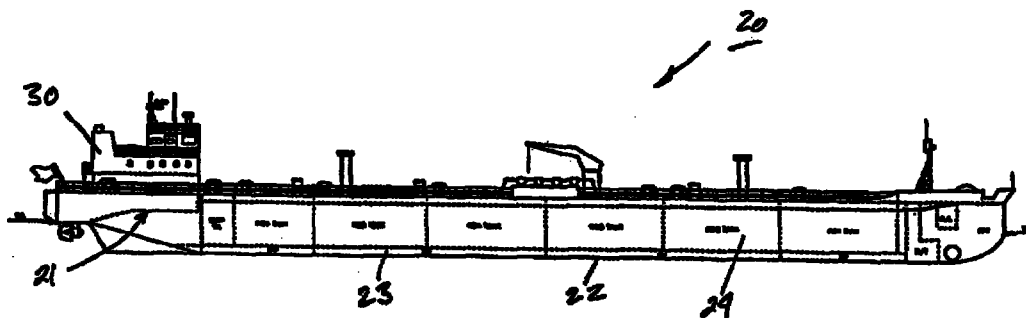
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(21) International Application Number: PCT/US96/08275 (22) International Filing Date: 16 January 1996 (16.01.96) (30) Priority Data: 08/373,578 17 January 1995 (17.01.95) US (71) Applicant: SKARHAR, INC. [US/US]; 66 Field Point Road, Greenwich, CT 06830 (US) (72) Inventor: HARA, James, H.; 83 Ridgefield Road, Ridgefield, CT 06877 (US) (74) Agent: CROZIER, John, H.; 1934 Huntington Turnpike, Trumbull, CT 06611-5116 (US)	(81) Designated States: CN, JP, KR, SG, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>	

(54) Title: INTEGRATED TUG/BARGE WITH RIDING PUSHER BOAT



(57) Abstract

An integrated tug/barge (ITB) (20) for carrying cargo, including: a cargo carrying barge (22) having no means of propulsion; and a tug boat (30) mounted on top of the barge such that the tug boat and the barge will experience identical motion when the ITB is operated, the tug boat including apparatus (50, 52) for propulsion and maneuvering of the ITB. In a further aspect, a method of launching a tug boat from the ITB, the method including: pushing the tug boat aftward until the center of gravity thereof is aft of a knuckle point (70) formed by horizontal and sloped portion of the floor of a recess (21) in which the tug boat is mounted and permitting the tug boat to slide down the sloped portion of the bottom of the recess into water in which the barge is floating. In an additional aspect, a method of forming the ITB, the method including: ballasting the barge so that the bottom of the recess is under the surface of the water; using the apparatus for propulsion to propel the tug boat into the recess; securing the tug boat to the barge; and reballasting the barge to a normal position in the water.