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[54] SYSTEM FOR DEPLOYING WEAPONS CARRIED IN AN ANNULAR CONFIGURATION IN A UUV

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[57] ABSTRACT

[73] Assignee: The United States of America as represented by the Secretary of the Navy, Washington, D.C.

An unmanned undersea vehicle system includes a remote-controlled, unmanned undersea vehicle and a mother vehicle interconnected by a communication link. The unmanned undersea vehicle includes a weapon compartment, an erectable observation mast and a control element. Within the weapon compartment are a plurality of weapon deployment devices situated about a central core, each weapon deployment device having a weapon canister for carrying a weapon. The weapon deployment devices are pivotable between a retracted position and an extended position. Each weapon canister includes end caps at opposing ends which are discharged when the weapon contained therein is fired to allow seawater to enter. The erectable observation mast obtains environmental information. The control element controls pivoting of the weapon deployment devices between the retracted, non-deployed position and the extended, deployed position to facilitate firing of a weapon, and retraction after firing. The weapon canisters from which weapons have been fired retain seawater to provide for an axi-symmetrical distribution of mass. The mother vehicle generates command information for controlling the control element and receives unmanned undersea vehicle status information and processes it for use in generating the command information. The communication link facilitates transfers of command information from the mother vehicle to the unmanned undersea vehicle and unmanned undersea vehicle status information from the unmanned undersea vehicle to the mother vehicle.

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[58] Field of Search 114/21.2, 312, 114/316, 317, 318; 89/1.809, 1.81; 244/3.12; 342/54, 357

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9 Claims, 9 Drawing Sheets

