



US006079347A

United States Patent [19]
Lieb

[11] **Patent Number:** **6,079,347**
[45] **Date of Patent:** **Jun. 27, 2000**

[54] **TOMBSTONE MOUNTED, TORPEDO TUBE
FLOW CONTROL VALVES**

5,448,962 9/1995 Moody 114/238

FOREIGN PATENT DOCUMENTS

[75] **Inventor:** **George W. Lieb, North Kingstown, R.I.**

403158 5/1923 Austria 114/238

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

Primary Examiner—Jack W. Lavinder
Attorney, Agent, or Firm—Michael J. McGowan; James M.
Kasischke; Prithvi C. Lall

[21] **Appl. No.:** **09/120,873**

[57] **ABSTRACT**

[22] **Filed:** **Jul. 14, 1998**

[51] **Int. Cl.⁷** **F41F 3/10**

[52] **U.S. Cl.** **114/238**

[58] **Field of Search** 114/238, 319,
114/239; 89/1.81, 5; 251/145

A tombstone assembly within a vessel utilizes disk control valves for controlling the flow of seawater to torpedo tubes. The disk control valves have disks abutting flow ports on a vertical plate within a tombstone. The vertical plate separates an impulse chamber from a plurality of tube chambers. The tube chambers hold the torpedo tubes. The disks control the flow of seawater between the impulse chamber and the tube chambers. The seawater is initially pumped from outside the vessel through a water cylinder into a lower impulse tank then into the impulse chamber of the tombstone. The disk valves then control the flow of the seawater to the tube chambers.

[56] **References Cited**

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11 Claims, 4 Drawing Sheets

