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US005757725A

United States Patent [19]

Wilson et al.

[11] **Patent Number: 5,757,725**

[45] **Date of Patent: May 26, 1998**

[54] **DUAL ZERO VELOCITY TOWED ARRAY SYSTEM**

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[21] Appl. No.: **914,022**

[22] Filed: **Aug. 12, 1997**

[51] **Int. Cl.**[6] **G01S 3/80**

[52] **U.S. Cl.** **367/130**

[58] **Field of Search** 367/130, 106, 367/20, 16; 114/242

[56] **References Cited**

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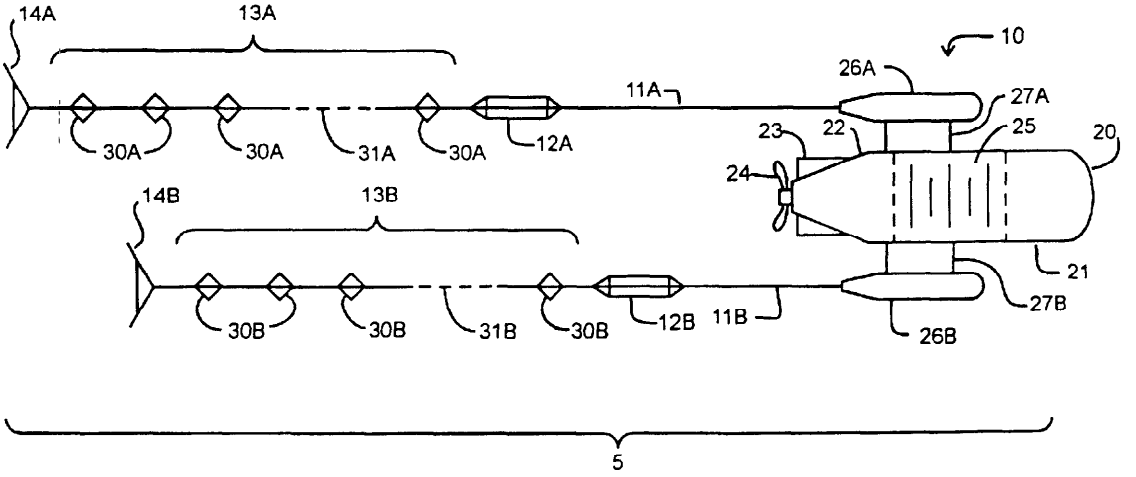
[57] **ABSTRACT**

A dual zero velocity towed array system for use in an ocean environment comprises a plurality of towed array subsystems and a deployment vessel. Each towed array subsystems comprises a rear drogue, an elongated communication cable having mounted thereon at least one acoustic sensor. The deployment vessel deploying the towed array subsystems. The deployment vessel moving in a forward direction through the ocean environment at a selected forward motion rate and alternatingly deploys the at least one acoustic sensor and communication cable of alternate ones of the towed array subsystems during successive iterations. In each iteration the deployment vessel deploys one of the towed array subsystems rearwardly at a deployment rate corresponding to the forward motion rate, thereby to maintain the at least one acoustic sensor and communication cable in a stable position in the ocean environment. While it deploys one of the towed array subsystems during each iteration, the deployment vessel retracts the other of the towed array subsystems for deployment in the next iteration.

7 Claims, 1 Drawing Sheet