



US006016453A

# United States Patent [19]

[11] Patent Number: 6,016,453

Pollock, Jr. et al.

[45] Date of Patent: Jan. 18, 2000

[54] METHOD FOR THE COLLECTION AND REPLAY OF SUBMARINE OPERATIONAL DATA

[56] References Cited

[75] Inventors: James S. Pollock, Jr. Portsmouth; Joan M. Cembrola. Bristol, both of R.I.

U.S. PATENT DOCUMENTS  
5,638,273 6/1997 Coiner et al. .... 701/35

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

Primary Examiner—William A. Cuchlinski, Jr.  
Assistant Examiner—Yonel Beaulieu  
Attorney, Agent, or Firm—Michael J. McGowan; Robert W. Gauthier; Prithvi C. Lall

[21] Appl. No.: 08/840,116  
[22] Filed: Apr. 21, 1997

[57] ABSTRACT

[51] Int. Cl.<sup>7</sup> ..... G06F 19/00  
[52] U.S. Cl. .... 701/21; 701/24; 701/35; 434/11; 114/312; 114/316; 89/41.01; 89/41.14; 360/5; 364/578  
[58] Field of Search ..... 701/21, 24, 35; 434/11, 13; 114/312, 314, 316; 89/5, 41.01, 41.14; 364/578; 360/5

A method for recording operational data relating to submarine operations is provided including means for playing back the recorded data thereby providing a near real time play-back and analysis for the submarine's crew and/or shore based facilities.

20 Claims, 7 Drawing Sheets

