



US005432302A

United States Patent [19]**Abdow****[11] Patent Number: 5,432,302****[45] Date of Patent: Jul. 11, 1995****[54] HYDROSTATIC SEALING SLEEVE FOR SPLICED WIRE CONNECTIONS****[75] Inventor:** David A. Abdow, Somerset, Mass.**[73] Assignee:** The United States of America as represented by the Secretary of the Navy, Washington, D.C.**[21] Appl. No.:** 978,550**[22] Filed:** Nov. 19, 1992**[51] Int. Cl.:** H02G 15/18**[52] U.S. Cl.:** 174/84 R; 174/70 R**[58] Field of Search:** 174/70 R, 77 R, 84 R, 174/84 C, 85, 91, 92, 93**[56] References Cited****U.S. PATENT DOCUMENTS**

2,958,723 11/1960 Logan et al. 174/84 C

3,065,292 11/1962 Chickvany 174/84 C

3,525,799 8/1970 Ellis 174/84 R

3,553,631 1/1971 Shlesinger, Jr. 174/84 R

3,770,876 11/1973 Post 174/84 R X
3,823,254 7/1974 Smith 174/92**Primary Examiner—Peter Dungba Vo****Attorney, Agent, or Firm—Michael J. McGowan;**
Prithvi C. Lall; Michael F. Ogle**[57] ABSTRACT**

A hydrostatic sealing sleeve hydrostatically seals a spliced wire connection in high pressure underwater conditions. The sealing sleeve is fashioned from an elastomeric compound, such as neoprene, and is fitted over one end of an insulated wire that is to be spliced onto a butt wire splice. The other insulated wire is spliced together with the first wire and the sealing sleeve is then slid over the butt wire splice where it rests in a centrally located cavity inside the sleeve. The outer ends of the sealing sleeve include sealing baffles which compress onto the outer peripheral surfaces of the insulated wires, creating a high pressure water tight seal.

4 Claims, 1 Drawing Sheet