

United States Patent [19]
Ruszkowski, Jr.

[11] **Patent Number:** 5,717,397
 [45] **Date of Patent:** Feb. 10, 1998

[54] **LOW OBSERVABLE SHAPE CONVERSION FOR AIRCRAFT WEAPONRY**

[75] **Inventor:** Robert A. Ruszkowski, Jr., Fort Worth, Tex.

[73] **Assignee:** Lockheed Martin Corporation, Fort Worth, Tex.

[21] **Appl. No.:** 649,213

[22] **Filed:** May 17, 1996

[51] **Int. Cl.⁶** H01Q 17/00; B64D 7/00

[52] **U.S. Cl.** 342/2

[58] **Field of Search** 342/1, 2, 3, 4, 342/5; 244/121

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,997,899	12/1976	Rolsma	342/3
4,947,174	8/1990	Lehman et al.	342/3

[57] **ABSTRACT**

An apparatus for encapsulating a warhead or bomb for the purpose of reducing the weapon's radar cross-section, including a hollow jacket and a hollow tail section. The warhead is inserted into the specially-shaped jacket and into at least part of the tail section. The jacket is secured to the warhead by lugs and the tail section is secured to the jacket or to the warhead. The jacket has two pointed seams on opposite sides of a vertical plane passing through the warhead pointing outward from the vertical plane and which extend along the length of the jacket. The front of the tail section has a serrated edge which overlaps the rear end of the jacket. The tail section has horizontal fins and downward and outward extending fins. The lugs allow the apparatus to be releasably attached to the bottom the fuselage or the bottom of a wing pylon of a military aircraft.

14 Claims, 12 Drawing Sheets

