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[54] **FIBER-OPTIC BUNDLE AND COLLIMATOR ASSEMBLY**

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[57] **ABSTRACT**

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

There is presented a fiber-optic bundle and collimator assembly comprising a plurality of bodies of cylindrical configuration and of equal diameter arranged side by side in a hexagonal close-packed configuration, a retainer for retaining the bodies in the close-packed configuration, and a potting material for locking the bodies in position. A plurality of the bodies and fiber-optic ferrules have therein a single optical fiber. A remainder of the bodies are non-optical fiber bearing ferrules in alignment width-wise of the assembly to form a collimator assembly face. The fiber-optic ferrules are each recessed from the assembly face to form a pocket. A spacer is disposed in each pocket and abuts a fiber-optic ferrule, and a spherical lens is disposed in each pocket and abuts a spacer. Each of the lenses is of the same diameter as its associated fiber-optic ferrule, and has its axis in alignment with the axis of the associated fiber-optic ferrule optical fiber.

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[51] **Int. Cl.⁶** G02B 6/26

[52] **U.S. Cl.** 385/35; 385/78

[58] **Field of Search** 385/74, 78, 35, 900, 385/64, 82, 54

[56] **References Cited**

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5 Claims, 1 Drawing Sheet

