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Offenbacher [43] **Apr. 5, 1983**

[54] **METHOD OF FABRICATING A BEARING**

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[51] **Int. Cl.**[3] **B21D 53/10**

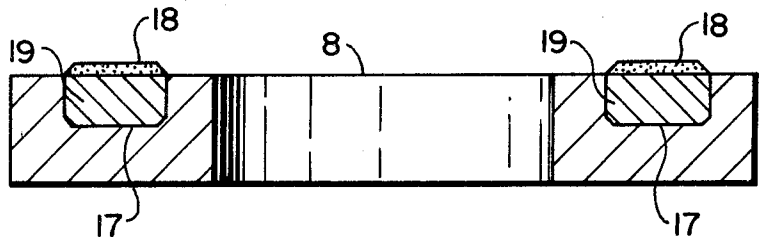
[52] **U.S. Cl.** ..... **29/149.5 R;** 29/149.5 NM; 308/DIG. 8; 384/95

[57] **ABSTRACT**

The mating halves **7** and **11** of a new type of thrust bearing for a down hole drilling motor **1** are fabricated by a technique which ensures that the composite diamond compact inserts **9** or **13** are coplanar with each other. Composite compacts are utilized having a chamfer on both the diamond table **18** and the substrate **19.** These hard inserts are inserted into recesses **17** in steel bearing body rings **8** or **12,** said recesses being the same depth as the substrate. The composite compacts are furnace brazed below the degradation temperature of the diamond. During brazing a weight is placed on the compacts to maintain their coplanar relationship. The space between the inserts **15** is maintained at less than half their diameter. This fabrication technique results in a smooth running, low friction thrust bearing for rotating equipment.

9 Claims, 1 Sheet Drawing,

10 Pages Specification



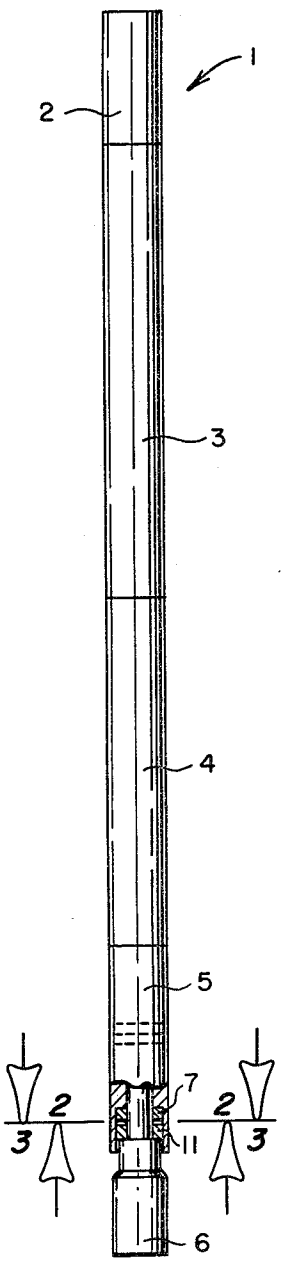


FIG. 1

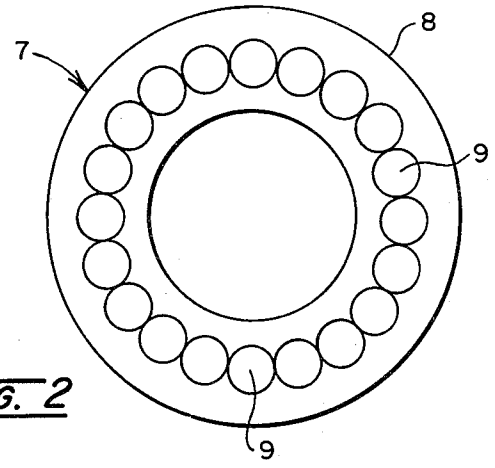


FIG. 2

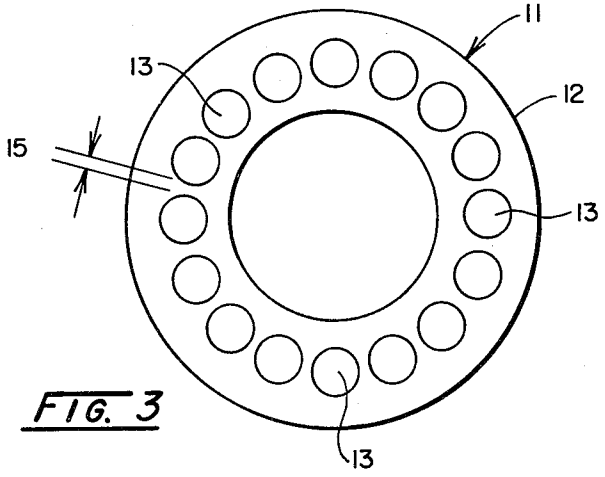


FIG. 3

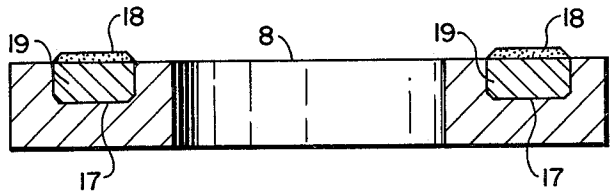


FIG. 4