SHOCK RESISTANT BEARING

ABSTRACT

A hydrodynamic bearing journaling a shaft includes a rotatable bushing journaling the shaft and thrust plates on the shaft at opposite ends of the bushing. The bushing is encased in a cylindrical sleeve. Lubricant containing clearance spaces are formed between the shaft, bushing, sleeve, and thrust plates. One or more internal helical passages are formed between the bushing and sleeve and open into the axial ends thereof adjacent to the thrust plates. An internal radial chamber between the bushing and sleeve opens into the helical channel through radial ports for providing lubricant between the journal bearing and the shaft and thrust plates.

FIGURE 3