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(54) Title: DIFFUSER ASSEMBLY FOR UPWARD, DOWNWARD AND RADIAL PUMP PROTECTION

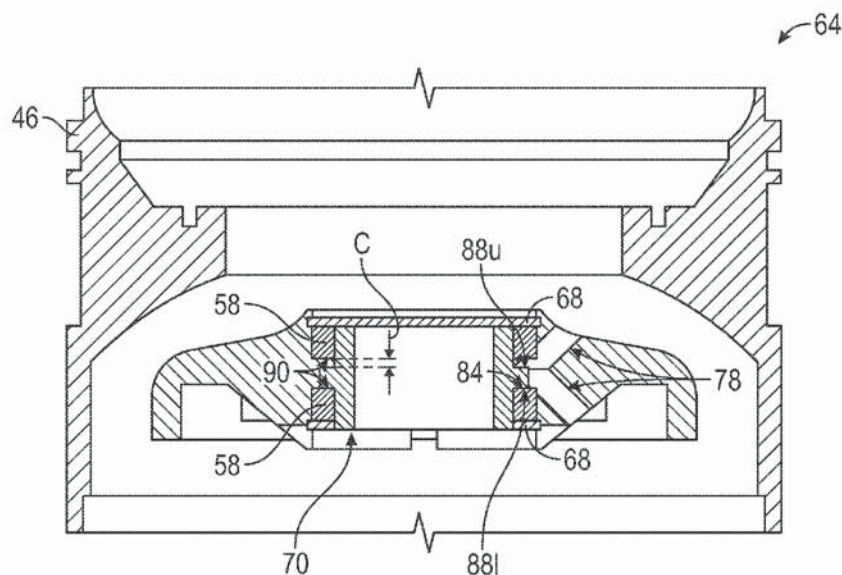


FIG. 3B

(57) Abstract: A diffuser subassembly for use in downhole submersible pump assemblies includes a bearing set for supporting a drive shaft of the pump assemblies. The bearing set includes a sleeve for supporting the drive shaft in upward, downward and radial directions. The sleeve includes a central flange captured axially between a pair of bushings fixed to a diffuser body. Axial loads from the drive shaft may be transferred through the central flange of the sleeve to one or the other of the bushings into the diffuser body to accommodate upward and downward thrust forces. The bushings may be keyed to discourage rotational motion with respect to the diffuser body.



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