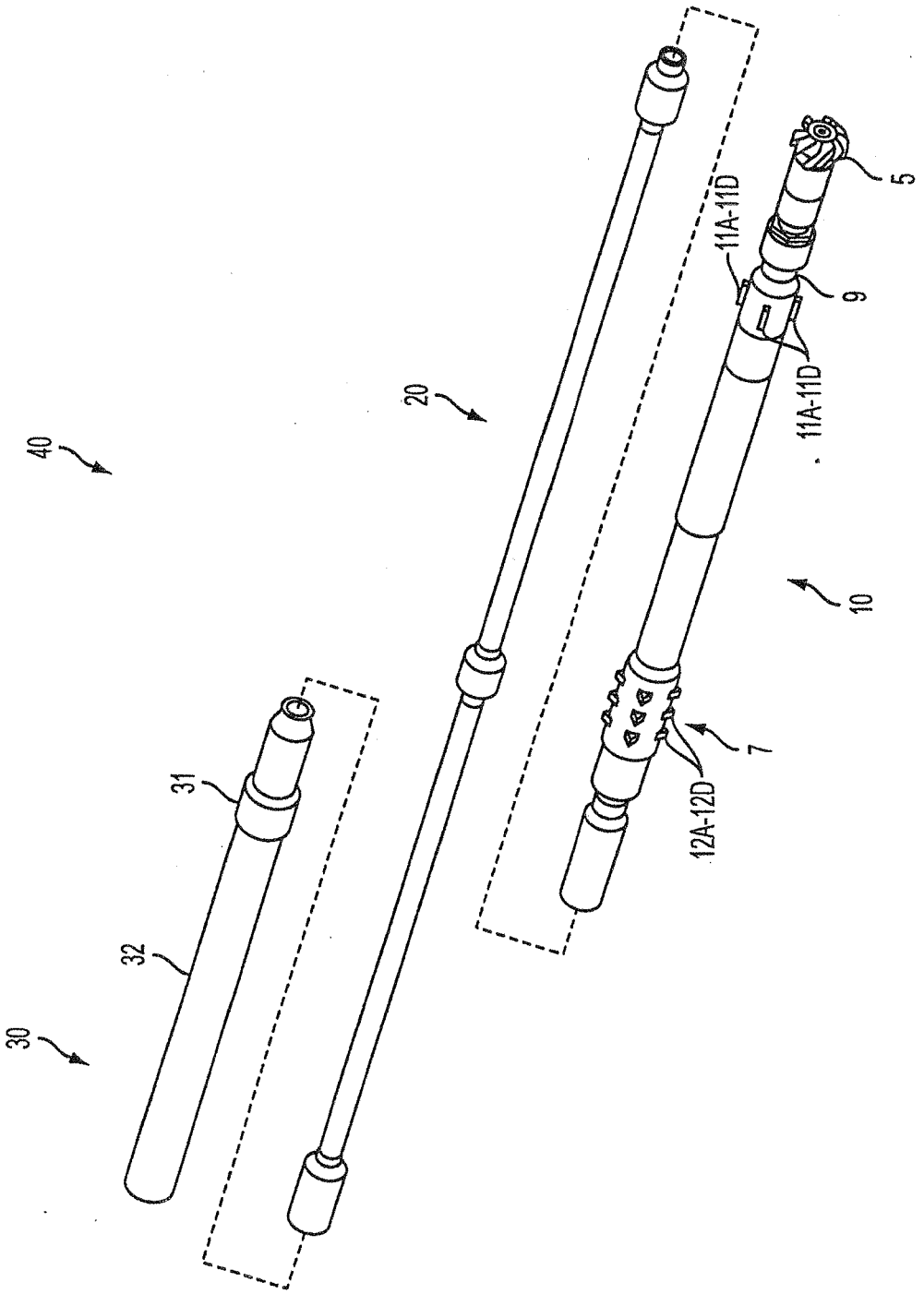


FIG. 1

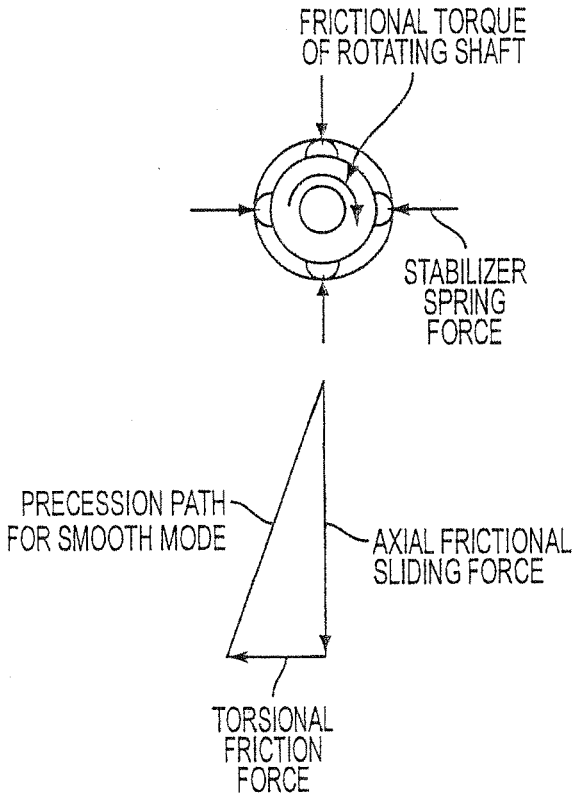

FRICTIONAL TORQUE
OF ROTATING SHAFT
STABILIZER
SPRING
FORCE
PRECESSION PATH
FOR SMOOTH MODE
AXIAL FRICTIONAL
SLIDING FORCE
TORSIONAL
FRICTION
FORCE

FIG. 2

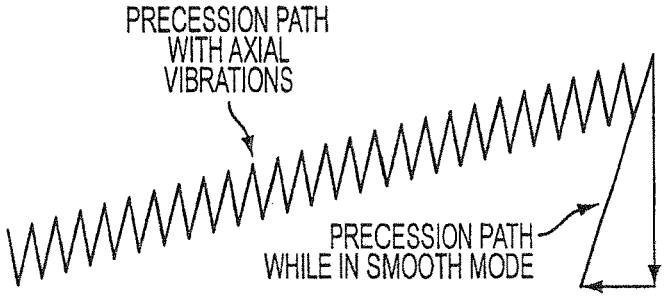

PRECESSION PATH
WITH AXIAL
VIBRATIONS
PRECESSION PATH
WHILE IN SMOOTH MODE

FIG. 3

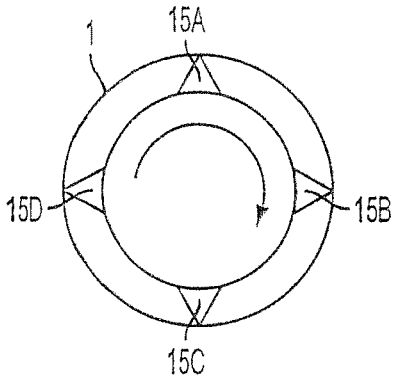


FIG. 4A

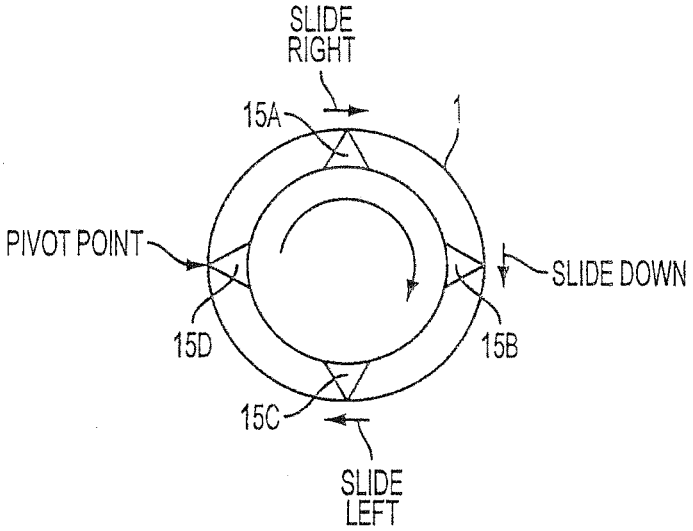


FIG. 4B

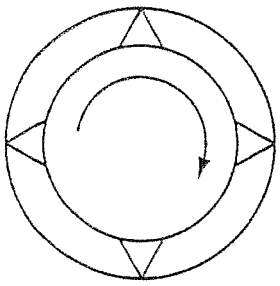


FIG. 4C

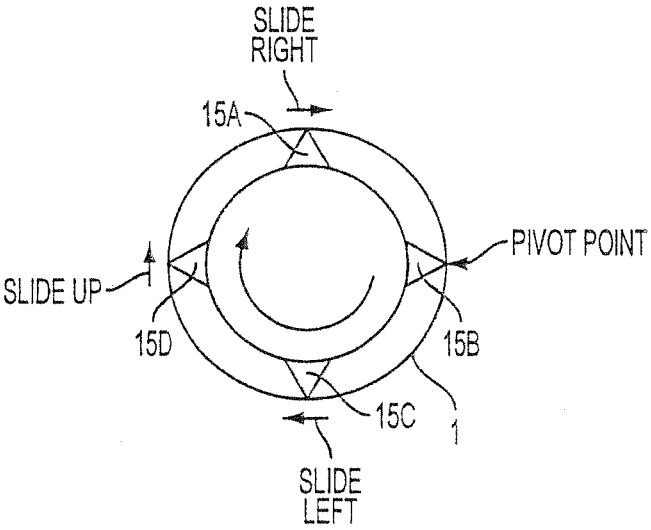


FIG. 4D

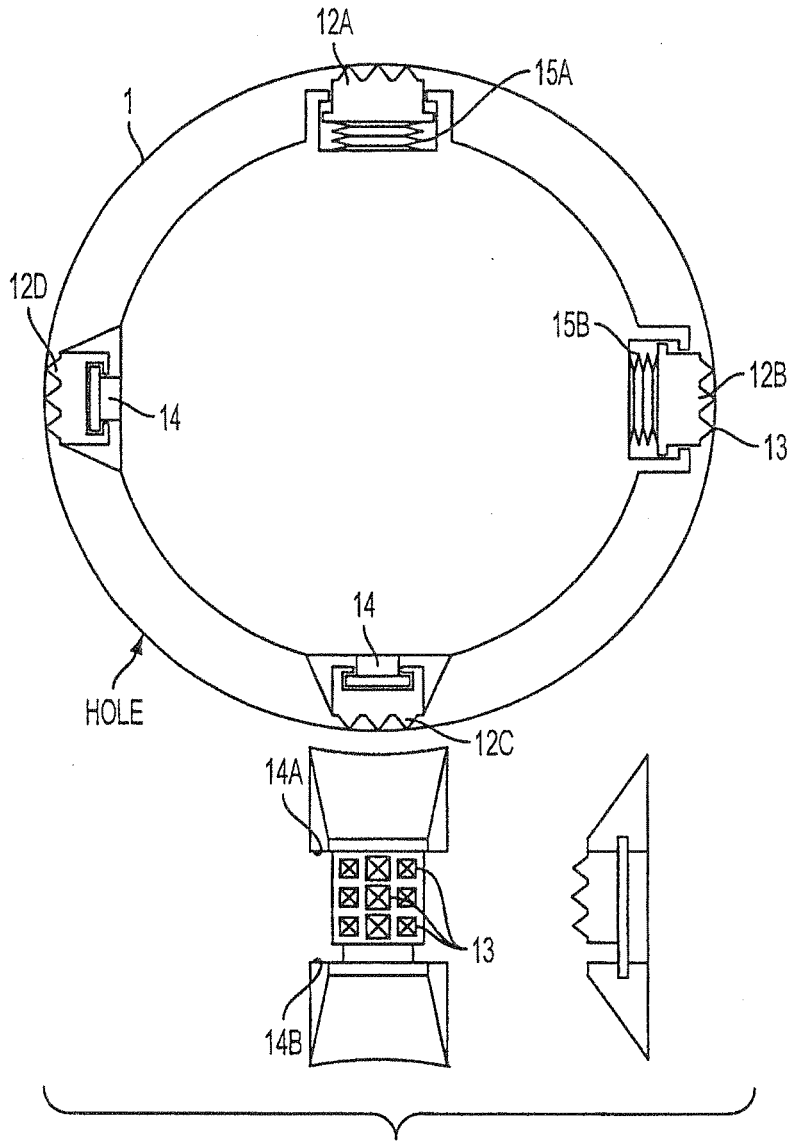


FIG. 5