

The invention refers to the mechanical engineering, in particular to the planetary gearings of high bearing capacity.

The precession reduction gear includes central gear-wheels, a block-satellite gear with rollers and a mechanism for generation of the precession motion. The block-satellite gear contains two rings with the same number of gears, placed at an angle of the great conic axoid, on two sides of which there are installed two fixed central gear-wheels with the same number of gears. In the hub of the block-satellite gear there are made grooves, the bottom first curvature centre of which is placed on one side of the precession centre, and the balls, disposed into these grooves, are also disposed into the grooves of the spherical bush, rigidly coupled with the driven shaft, the bottom first curvature centre of which is placed on the other side of the precession centre.

The result of the invention consists in increasing the bearing capacity of the reduction gear by torque transmission via two fluxes, in reducing the axial load in engagements by optimization of the gear profile and in uniformly transmitting the torque from the block-satellite gear to the driven shaft.

Claims: 1

Fig.: 4