

The invention related to the mechanical engineering, in particular to the precession mechanical gears.

The precession gear includes a body 1, wherein there are placed central gear wheels - immobile 5 and mobile 6, a satellite unit 2 with two gear rings 3 and 4, drive 8 and driven 7 shafts, a precession generator, containing balls 11, placed into two annular grooves, one of which 9 being made onto the surface of the drive shaft 8, the other 10 – into the hub of the satellite unit 2. The axes of rotation of the conic axoids of the satellite unit 2 intersects at an angle equal to the angle between the axes of the drive 8 and driven 7 shafts. The annular groove 9 is inclined about the axis of the drive shaft 8 at an angle equal to the nutation angle of the satellite unit 2.

The result consists in expanding the functional possibilities by transmitting the motion between the shafts, placed at an angle.