

The invention relates to the mechanical engineering, in particular to the mechanical variable-speed gears. The precession planetary variable-speed gear includes a carcass, wherein it is placed a satellite gear block (12), central gearwheels (13, 14), and an external bush (6) with grooves made onto the inner spherical surface. The separator (5) is made with slots, wherein there are installed solids of revolution (4). Onto the outer spherical surface of the internal bush (3) there is made a sinusoidal groove. The inner surface of the internal bush (3) is made cylindrical with inclined axis. The internal bush (3) is installed onto a cylindrical bush (18), one end of which is made with inclined axis and fixed onto the drive shaft (1) with the possibility of relative limited rotation about it, the other end of which is made cylindrical with straight axis, onto the surface of which there are made inclined grooves, onto which it is installed a hollow bush (19) with internal longitudinal grooves, the teeth of which are placed into the inclined grooves of the cylindrical bush (18). Onto one end of the hollow bush (19) it is made a tooth, entering into the longitudinal groove, made onto the cylindrical surface of the drive shaft (1). The crank (22) is kinematically joined with the internal bush (3) with inclined axis. Novelty consists in that the separator (5) is made with spherical inner and outer surfaces, wherein there are made inclined slots. The grooves onto the inner spherical surface of the external bush (6) are made straight. The outer surface of the external bush (6) is made cylindrical with inclined axis and rigidly joined with an inclined flange and a driven shaft (7). The satellite gear block (12) is installed by means of the solids of revolution (10, 11) onto the external bush (6) with inclined axis and flange. One of the central gearwheels (13) is made fixed and the other (14) – mobile and rigidly joined with a second hollow driven shaft (15).

Claims: 1

Fig.: 3

