

The invention relates to the mechanical engineering, namely to the mechanical transmissions and may be used for stepping up the revolutions of the machine tool.

The planetary precession step-up gear includes a body 1 with cover 3, wherein there are placed: a mobile central gear-wheel 6, meshing with a satellite gear wheel 4, shafts: drive 7 and driven, as well as a crank 14. The mobile central gear-wheel 6 is rigidly joined with the drive shaft 7. The satellite gear-wheel 4, the teeth of which are made in the form of rolls 5, meshes on the other side with a fixed central gear-wheel 2, rigidly fixed into the cover 3 of the body 1. The satellite gear-wheel 4 is cinematically joined by means of solids of revolution 8 with the disk 10 placed on the end of the cover 3 of the body 1. At the same time, the disk 10 is installed by means of solids of revolution, coming in contact with the inner lateral surface of the rigidly fixed central gear-wheel 2 and with the inner face of the cover 3. Onto the disk 10 there is rigidly fixed a medium central gear-wheel 11, meshing with the teeth, made in the form of rolls 12 of the additional satellite gear-wheel 13. The additional satellite gear-wheel 13 is freely installed onto the crank 14, joined with the driven shaft. Onto the outer lateral surface of the additional satellite gear-wheel 13 there are made sockets, wherein there are placed solids of revolution 16, coming in contact with the inner lateral concave surface of the satellite gear-wheel 4.

Claims: 1

Fig.: 1

