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The invention relates to the mechanical engineering, in particular to the mechanical variable-speed drives.
The friction precession variable-speed drive includes a body with covers (4), wherein there are placed a driven shaft (22), a drive shaft (11), mounted thereon a mechanism for transforming its motion into the precession motion of the satellite gear (1), a central wheel (2) with inner spherical surface, at the same time the central wheel and the satellite gear are spring-loaded about each other. The mechanism for transforming the drive shaft motion into the precession motion of the satellite gear contains a telescopic crank (8) joined with it, one end of which is placed into a radial groove (9) of a disk (10), rigidly fixed to the drive shaft (11), and the second is kinematically joined through levers, cranks and crossheads with inertial balls, placed into another radial groove of the disk, perpendicular to the first one. The satellite gear (1) is mounted onto a spherical support (7), joined with the telescopic crank (8), and joined with the body cover by means of curvilinear pins (5), rigidly fixed into it. Into the axial canals, made into the driven shaft (22), there are placed spring-loaded plungers (19), the free end of each of which comes in contact with the plane frontal surface (18) of the satellite gear, and to the lateral surface of each plunger there is fixed a roller (20), simultaneously placed into an axial groove (21), made onto the outer surface of the driven shaft (22), and into an inclined groove (23), made onto the inner surface of a support, having in the transversal section the form of cylinder sectors, rigidly fixed onto the inner surface of a disk (24), provided with external gear profile. Into the hollow hub (3) of the central wheel (2) there are rigidly fixed disks (26), kinematically joined by rolling elements (25) with the external gear profile of the supports.

Claims: 1
Fig.: 3