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Title

PLANETARY PRECESSIONAL TRANSMISSION

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Description

The technical result is an increase in load-bearing capacity and mechanical efficiency, as well as a widening of the kinematic and functional possibilities.

This result is achieved due to the kinematic scheme of the transmission, as well as the specificity of the gear of the gear wheels of the satellite wheels driven in spherospacial motion gearing with the teeth of the fixed central wheel and the teeth of the crown of the satellite wheel with the teeth of the movable conical central wheel.

Transmission with pre-gearing which includes a housing, crankshaft and coaxial driven shaft, two gear wheels with toothed crowns, movable and immobile central conical wheels, characterized in that the transmission consists of at least two kinematic satellite wheels connected consecutively by at least one intermediate crankshaft installed on the bearing bracket in the housing and which is fitted laterally with a notched offset from the notation angle θ to the common axis of the center wheels, at the same time the first satellite wheel by means of a bearing mounted on the end of its half-axis is kinematically coupled to the crankshaft, and the second satellite wheel by means of a bearing mounted on the end of its semi-axle is kinematically coupled to the intermediate crankshaft housing offset from the notation angle θ to the common axis of the central wheels and conical crowns of the satellite wheels of immobile and movable conical central wheels conjugate between they multiply in convex-concave contacts.

The technical project and the industrial prototype are developed.