

MD.22.

Title **Precessional gear transmission**
Bostan Viorel, Bostan Ion, Vaculenco Maxim, Bodnariuc Ion, Ciobanu Radu, Ciobanu Oleg, Vengher Dumitru

Authors

Institution **Technical University of Moldova**
*WO 2021/137682 A1 /
Patent application No. PCT/MD2020/000004*

Description *The precessional gear transmission comprises a body, a*

INTERNATIONAL EXHIBITS

EUROINVENT 2023

EN

satellite wheel with two bevel gear rings driven by a crankshaft in sphero-spatial motion around a fixed point, two central bevel wheels, one immobile fixed in the body and the other mobile mounted on a driven shaft. The teeth of the gear rings have a circular arc flank profile, those of the central bevel wheels are variable curvilinear. The configuration of the parameters of angles, the number of teeth, the ratio of the numbers of teeth of the mating wheels in the gears and the radius of the circular arc of the teeth profile of the gear rings determines the geometry and the kinematics of the contact of the teeth, the degree of frontal overlap, expressed by the number of simultaneously engaged pairs of teeth and defines the pressure angle between the mating flanks.

Class