

Technical University of Moldova

MD.6.

Title

Generation of precessional gearing with convex-concave contact

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Patent no.

Mechanical transmission consumers impose more and more demands on increasing the energy efficiency and their load bearing capacity. If about 80% of the global energy is transmitted to the drive mechanisms of the machines through mechanical transmissions, then the increase of their mechanical efficiency by only 1% leads to the saving of 0.8% of the energy produced on a global scale.

Description

EN

The development of the robotics and mechanical systems with compactness restrictions impose to the gear ever more stringent requirements regarding the mass and gauges, the quality of the gear material, the technological efficiency measured during the manufacturing operations, the cost of production, etc.

These requirements taken as a whole lead to the need to diversify and modernize the toothed gears A^D in the form of the tooth contact of the gear geometry and toothed wheels manufacturing technology.

These requirements can largely be met by precessional transmissions with a new toothed gear concept with „congruent” concave-concave contact.

Class no.