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Title	**PROCESSES AND DEVICES FOR ADDITIVE MANUFACTURING OF GEARWHEELS AND PRECESSIONAL GEARS**
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Description

The invention relates to mechanical engineering, in particular to additive technologies for the manufacture of gearwheels of planetary precessional transmissions.

The processes for additive manufacturing of gearwheels consist in the fact that deposition of the layer of polymeric material, which forms the core of the gearwheel tooth is carried out of dodecahedral cellular elements with a fine structure or of metal powders of dodecahedral cellular elements with a fine structure, at the same time deposition of the layer of polymeric material, which forms the surface layer of the gearwheel tooth, is carried out of diamond-type cellular elements with a coarse structure or of metal powders with the addition of a solid lubricant of rhomboid cellular elements with a coarse structure. The deposition of the layer of polymeric material of diamond-type cellular elements with a coarse structure on the surface of teeth with a convex-concave profile is carried out of polymeric material or metal powders of dodecahedral cellular elements with a fine structure. Deposition is carried out by sphero-spatial motion.