The invention relates to the mechanical engineering, in particular to a gas turbomachine.
The turbomachine includes a body 1, wherein there are placed a rotor 3 with blades 4, the hub inclined flanges 5 of which are placed between the gear rings 7 and 8 of the satellite gear unit 9, being in engagement with the teeth of the central wheels 10 and 11, the last of which is installed onto the driven shaft 12. The hot gas fed through the nozzle 15 acts upon the blades 4, sets in rotation the rotor 3 and through the hub inclined flanges 5 is transmitted to the satellite unit converting into a precession motion. As a result of engagement of the gear rings 7 and 8 of the satellite unit 9 with the central gear wheels 10 and 11, the driven shaft 12 will rotate with the preset reduction degree.
The result consists in expanding the functional possibilities and in reducing the overall dimensions.