

Wind power unit (WPU) with torque transfer from the wind-wheel through differential multiplicator with two output shafts to two generators, one of those is synchronous, and the other one – asynchronous. At making the WPU according to this scheme it is possible to simplify the structure due to excluding the sliding muff and capacitor battery, since the asynchronous generator shall provide needed sliding of the wind-wheel at wind puffs, and the synchronous one – generation of reactive power for normal operation of the asynchronous one and, at one of one of output shafts of the differential multiplicator being damped, for instance, the shaft of the asynchronous generator, this shall provide possibility of beginning of the WPU operation at smaller wind rates (2...3 m/s instead of 5...6 m/s for the WPU of common schemes) and increase of electric energy production by 10...15 %. The WPU proposed comprises wind-wheel, differential multiplicator with a shaft (planet carrier), satellites and pinions, those transfer rotation to the shafts of generators; asynchronous generator, to the shaft of this one brakes are installed, and synchronous generator. The wind-wheel is fixed on the shaft of differential multiplicator. Then torque is transferred through satellites to the pinions of the shafts of generators. This invention provides simplification of the WPU structure, increase of efficiency of operation, decrease of cost.