

## **OFFICIAL TESTIMONIAL**

on the invention of "Hydrostatic's [fluid power] prime mover"  
of Sayad Abdulla Mammadov

Hydrostatic [fluid power] prime mover - is an engine based on using of hydrostatics forces of pressure - so called "Archimed force" which present itself propeller type rotor with rubber balloons placed on the ends of tubical spokes connected on the common hub. In the time of periodical filling balloons by compressed air, feeding by the compressor with the following their dumping through the special distributor, volumes and forms of rubber balloons changes. During immersing of rotor under the level of water because of the difference in the value of archimed force, acting on country placed balloons occur disbalanced pair of forces creating turning moment on a shaft of rotor that bring it in a rotation. An especial importance have operating parameters of the equipment. In a conception of "operating parameters" including operating pressure of compressor needful for providing of stability operation of the hydro static's fluid power, capacity of hydro compressor equipment i.e. volumetric and weight discharge of compressed substance in this case air from which number of turn over of the rotor depend on: its obvious that while increasing and decreasing of the quantity of compressed air discharging into rubber balloons and while changing the frequency of discharge a number of rotor turn over can be easily regulated and by this quantity of the turning moment on a shaft of rotor of the engine. As its known regulation of turn over number is a positive quality for any type of the engine including considering engine.

Besides of it efficiency of the operation of hydro fluid power will depend on the choice of the optimal geometrical parameters of machines diameter of the operating wheel-rotor, number of balloons and their seizures basing on allowable speed of the operating agent flow with providing minimal hydraulic lost at the same time, from which will depend on the factor of useful work (efficiency) of the whole aggregate.

An idea put in the basis of the invention is logically true. Advancing is possible, in particular feeding by compressed air must be carried out not directly from the compressor but from receiver which exclude pulsation of the flow; to bring in motion rotor in the time of its starting up its necessary to provide for start up system; there is no any necessity in the additional vacuum pump because of the possibility of self dumping of cylinders. Constructive execution of the hydro static's fluid power can be varied.

The machines will be considerably effective in the sea oil field conditions, where they can be applied without any restriction in combination with current generator. Efficiency of the machine is considerably increase if instead of compressed air will be used the energy of passing natural gas stratum.

Djamalov R.I., Azizov A.G., Djanakhmedov A.H. - Azerbaijan State Oil Academy