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Flywheel gyroscopic damper for handheld camera 23

**The article deals with the construction of a system of gyroscopic stabilization of a television camera for filming with hands. The use of gyroscopic dampers for this purpose makes it possible to provide a sufficiently high accuracy of stabilization. However, such devices have a number of disadvantages, primarily related to the large mass and dimensions of the gyroscopic damper, as well as the poor quality of control. The article proposes a scheme of a gyroscopic damper with a flywheel as a support body. It is shown that the use of such a flywheel gyroscopic damper allows to provide high accuracy of stabilization while maintaining mobility requirements of filming, with smaller masses and dimensions and convenient control. The mathematical model of the flywheel gyroscopic damper and the results of studies of the efficiency of suppressing of the camera oscillations and its controllability depending on the parameters of the gyroscopic damper are presented.**

***Keywords: flywheel gyrostabilizer, flywheel, flywheel gyro damper, suppression of the oscillations.***

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