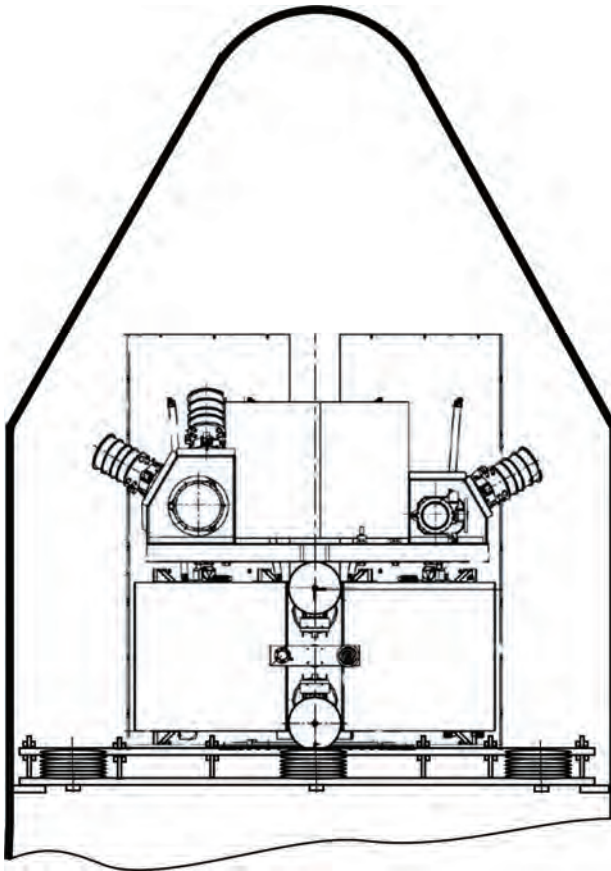


SYSTEM FOR SPACECRAFT PROTECTION FROM LONGITUDINAL VIBRATION LOADS DURING ITS ORBITING



Design layout

Areas of Application

The system is to be used for reducing vibration loads on the spacecraft

Stage of Development.
Suggestions for Commercialization

IRL2, TRL2
Principal diagram, sketch, and mathematical model of system for spacecraft protection from longitudinal vibration load during its orbiting are proposed

Specification

The proposed vibration protection is an autonomous passive system installed between the upper stage of carrier rocket and the spacecraft adapter. Its main element is an elastic dissipative module. One-dimensional motion of the vibroprotective system along the longitudinal axis is ensured by special guide rods

Advantages

The proposed system is lightweight and compact and damps the longitudinal vibrations in a wider frequency range as compared with the known counterparts. It reduces a longitudinal vibration load on Sich-2M spacecraft over twice at a frequency ranging from 5 to 10 Hz and 10 times within the range from 10 to 100 Hz

IPR Protection

IPR1

Contact Information

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