National Aeronautics and Space Administration
www.nasa.gov

Spring Joints with Overstrain Sensor

Case Number: GSC-15421-1
Patent Number: 7,968,812
Patent Exp. Date: 1/13/2029

DESCRIPTION

This technology is a flexible joint used in a rover robot for space exploration. The flexible joint has two degrees of freedom and has a pair of non-conductive spring cages which are placed at opposite ends to support a conductive compression spring with a longitudinal axis.

FEATURES AND BENEFITS

- The restoring forces are highly efficient in the flexible joint and the exact location of the bending spring can be observed accurately, by placing the conductive element including the threaded portions with nuts inside the compression spring.

APPLICATIONS

- Space Exploration
- Prosthetic Devices
- Mechanical Arms

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-15421-1, please contact:

Darryl Mitchell
Technology Manager
NASA Goddard Space Flight Center
darryl.r.mitchell@nasa.gov
301-286-5169