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(57) Abstract :

The present disclosure relates to an assembly adapted to be configured as a locking mechanism for landing legs of a space vehicle. The assembly includes a first magnet, a motor having a rotor configured with a centre of the first magnet. The motor is configured to controllably rotate the first magnet on its axis. A second magnet centrally aligned with the first magnet such that the unlike poles of the first magnet and the second magnet faces each other. An electromagnet disposed between the first and second samarium cobalt magnets. One or more memory alloys having a first end configured below the second magnet and a second end is coupled with a metal disc. The metal disc is operatively configured with the legs, and is configured to rotate on its axis.

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