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Topical white paper

<http://s.alchemer.com/s3/Call-to-the-Biological-and-Physical-Sciences-Community-White-Papers-Topical>

Cover Letter

Following to your announcement entitled :

**Call to the Biological and Physical Sciences in Space Community for White Papers**

**THE NATIONAL ACADEMIES OF SCIENCES-ENGINEERING-MEDICINE**

I am honoured to write you in view to publish my white paper entitled :

**Saving Energy in Satellites and Detection by Cameras from the Moon**

In waiting for a favourable response want, to accept my best greetings.

Signed : The author :

Miss Nouara Tinakiche

# Saving Energy in Satellites and Detection by Cameras from the Moon

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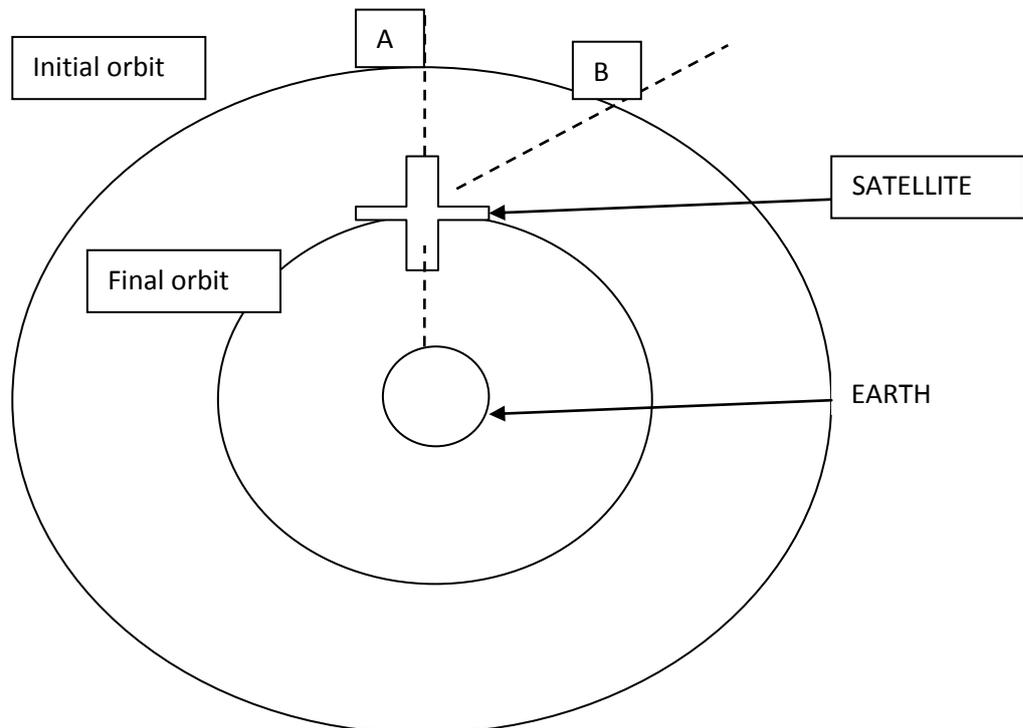
Algeria

Abstract: To reduce the energy consumption in satellites, I propose two methods. The first by letting periodically the satellite fall under the action of the Earth gravity only and return to its initial orbit. The second is to plant cameras turning with the moon around the Earth.

## THE WHITE PAPER/

To reduce the energy consumption in satellites, I propose to drive the satellite from its orbit till a lower altitude by extinguishing motors in the goal to reduce the gravitational energy (the potential energy) for a time and return periodically to its initial orbit instead staying all the time on its initial orbit. The satellite can return to its initial orbit and changes its position by going obliquely (to pass from the position A TO position B see the figure bellow)

(not necessary by taking the first vertical way) to save energy.



**Taking photos from planets or the moon:** I propose also in this work, instead using satellites to take pictures of planets in space, to plant developed cameras (Wi-Fi technology and CCD cameras) and other detectors on planets which turn around other planets as a satellite (for the example the moon which turns around our planet earth ) and we will receive pictures on our Computers .These cameras must be planted on the moon (by using a certain technology to overcome the lack of gravity on the moon) for example in some way to cover all points of the earth and by taking into account the motion of the earth and the motion of the moon. We calculate the time necessary to cover an area before leaving this area to put another camera beside the first camera and so on till covering all the region of interest. We need so to plant a number of cameras on the equator of the moon for example to cover regions on the earth. This technique costs a little thing compared to the detection by satellite. I suggest also to study the velocities of cameras planted on a mobile system to reach the characteristics of a geostationary satellite. A study based on relative motions of the moon and the earth can be interesting to make the moon with these cameras planted on it as a geostationary satellite.