Radio System Using Satellites

Summary of Patent

Problem:

Current means of establishing **Internet** network and Telephone Call /SMS access accross to individuals and companies in countries globally is very expensive and capital-intensive.

Providing **internet access** or **telephone services** can't be done without the expensive installation of Telecom towers (Masts) accross vast areas which often lead to running cost of billions of dollars which in turn lead to a ***hype in cost of purchase of these services to the end-users***.

Unknown to end-users, a low-cost satellite system would have the potential to replace tower-based sytems therefore making internet connection very cheap to access. Probably reducing the current cost of purchase of these services by half or even a third-quarter.

However, known satellite systems suffer from numerous drawbacks which includes:-

1. The need for **thrusters.***
2. Rocket fuel.
3. Navigational Hardware to keep the satellite in orbit.

These drawbacks increased the satellite size and weight, therefore increasing the cost of lauching the satellite into space and the cost building a satellite therefore making satellite technolgy impossible to be low-cost.

* thrusters:- a small rocket engine on a spacecraft, used to make changes in its flight path or altitude.

Solution:

A new kind of **battery-powered satellite** has been invented that uses a unique construction with on-board computers that eliminate the necessity for complex and costly control systems for maintaining the satellites in particular orbits and in particular altitudes.
Meaning no Thrusters (since there are on-board computers doing the job), no Rocket fuel (since it is battery-powered) and no Complex navigational Hardware since this new kind of **battery-powered satellite** will transfer packet-data throught radio routes which are determined by algorithms executed by the computers in the satellite, so no central computer is needed to specify which satellite or satellite will be best fit for a connection between ground stations.

In general, this new invention will enable the efficient and cost-effective implementation of **satellite internet services** to end-users accross the world at a global scale.

Overview:

The patent contains detailed and elabotate information regarding the technicalities involed in building such new system.

The simulation was meant to iterate how such system will work and give specific data as to **what realities are expected when using this new system as respects to its efficiency in sending packet-data** in the real-time from **ground station -> satellite**, from **satellite -> satellite** and from **satellite -> back to ground station**.