

## ABSTRACT

### A METHOD AND APPARATUS FOR SETTING AND INTEGRATING HOME AUTOMATION

#### GRID OR NETWORK WITH ELECTRICAL GRID

5 A method and apparatus for setting and integrating home automation  
grid with an electrical grid of a residence and commercial unit by  
structurally connecting intelligent support boxes of electrical  
wiring devices comprising AC outlet, switch, relay, hybrid switch-  
10 relay and hybrid switch of the wiring device attached into the  
intelligent support box. The box including intelligent control  
and communication circuits including RF, RFID, optical via plastic  
optical fiber and IR in line of sight for communicating commands  
and control including power consumption reporting from every  
outlet and switch. The power outlets include accesses for  
15 introduction of RFID sensor or optical sensor for identifying the  
appliance or the load powered via the outlet and communicating  
with the load or appliance by variety of signal used in the home  
automation grid and protocols including optical via cascading  
optical cable grid.

20 Fig. 2A