GRAPHENE BATTERY

ABSTRACT

A power management system employing a graphene battery pack is described. The graphene battery may include a positive terminal and a negative terminal, and one or more supercapacitors each connected to the terminals. In some embodiments, each of the supercapacitors may include current collectors/metal plates having a first graphene coating and a second graphene coating. In various embodiments, the power management system may include a computer system used to interface to an electricity grid associated with a premises and to a graphene battery. In some embodiments, the power management system can be configured to provide power to appliances within the premises under a first operation mode, which specifies the electricity grid as a sole power source for the appliances, or provide power to the appliances under a second operation mode, wherein specifies the graphene battery as the sole power source or a partial power source for the appliances.

[Figure 2]