

# Technology Transfer

**Area of Technology:** Mechanical Engineering

**Title of the Innovation:** SMART BIRD

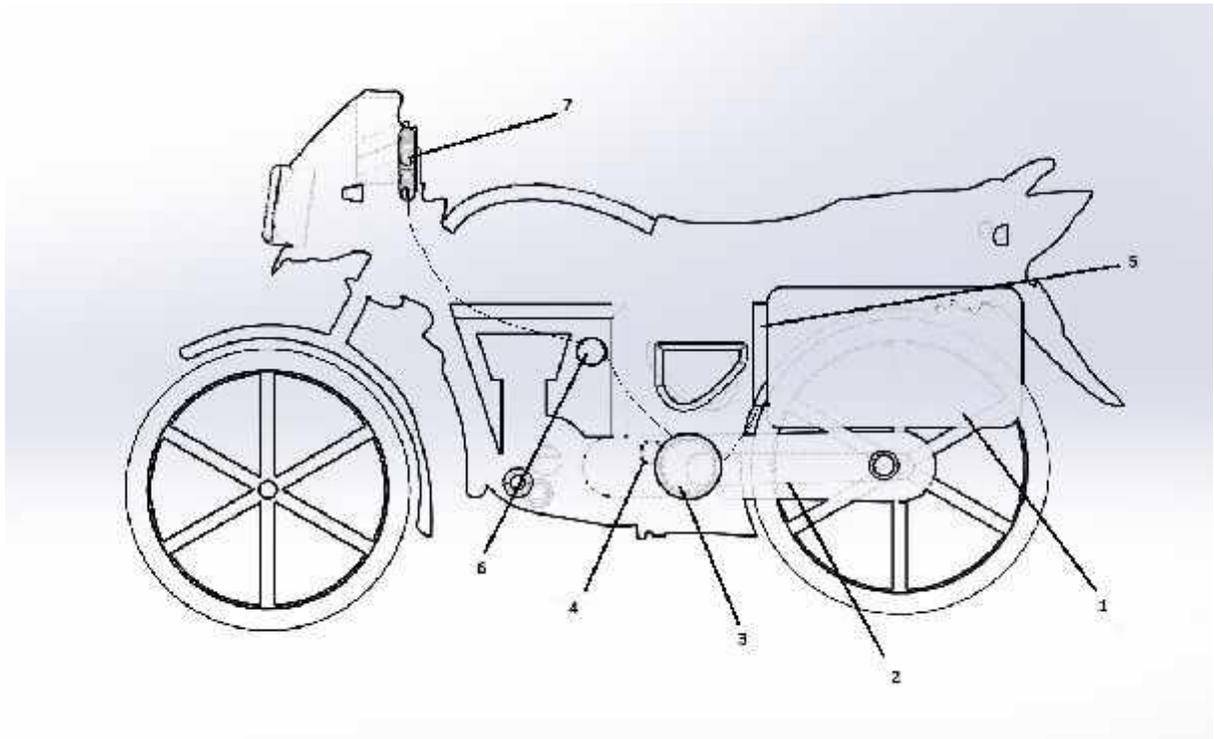
**Patent Grant Number:** 357023

## **Brief About Innovation**

In the recent years, there has been various hybrid configurations in vehicles such as fuel cell, gas turbine, solar, hydraulic, pneumatic, ethanol, electric and many more combinations have been developed for saving the energy. The present invention relates to a hybrid drive system for a vehicle to reduce the dependency on conventional energy sources. More particularly, the hybrid drive system is powered by multiple distinct energy sources which could be separately or in combination operate to propel the vehicle.

## **Salient Features:**

- The instant invention is developed as a hybrid drive system for the motorcycle with multiple distinct energy sources, which could be operated simultaneously to propel the vehicle.
- The present invention involves the configuration of the system is incorporated in the motorcycle and whole controlling is done with the help of electric controller.
- In an aspect of the present invention, the method of controlling the hybrid drive system is equipped with Li-ion battery, BLDC motor, DC motor controller, G.I. box and throttle for driving the motorcycle.
- In another aspect of the present invention, the motorcycle equipped with hybrid drive system is Eco-friendly and helps in reduction in air pollution caused by the vehicles running on petrol or diesel.
- Additional features and advantages of the present invention is focusing on integrating multiple functions in a motorcycle on low cost with high efficiency.



**Fig. Smart Bird**