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CTCI Science and Technology Creativity Scholarship

cityfirefly



This is a new kind of short distance transportation design. We design for green colony residence in ten years. It combines street light and bicycle. When you park this product, it turns out a street light at the place.



The speed of the product is slow, because the destination is in the green colony or between different green ones. We let center of gravity at the seat. So we could not use the weight of people but displacement causing by the vibration of the product. In the way, our inference is that the speed (kinetic energy) of the product causes vibration (potential gravitational energy), and then vibration plus the weight of people cause another great potential energy. In a word, we get short but continuous displacement. This also means that the magnetic field must change. We all know that Faraday's Law explains how a variable magnetic field produces an electromotive force (emf) that can generate a current into an electric circuit. This explains the source of energy from the product.



Because it is also public street light system, it needs to work all time when we park. Besides from vibration energy (potential gravitational energy and Faraday's Law) its parking lot can use solar energy as well. Light-color changing can also remind the users. For saving the space, we also create a new structure to make this product easier to storage.



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