ABSTRACT

To enable optimally use mobile phones, its battery must be in a normal state through the use of the charger. But under certain conditions , it often find difficulties when no portion of electricity as a power source. Solutions to overcome these difficulties is charging mobile phones, can be overcome by using an alternative charger, one of them is the use of kinetic charger. With respect to this kinetic mobile phone charger, this final project will use a working system of kinetic energy to produce electrical energy.

The working system of this kinetic charger is that mobile phone users simply move a mechanical kinetic, and directly rotate within the magnetic coil to generate electricity. The generated electricity will then be processed further in a series of stabilizers that can be used for charging batteries for mobile phones. The method used in this project is conducting experiments to obtain electrical output that can be used in charging batteries for mobile phones.

This kinetic charger can charge the mobile phone maximally during kinetic movement. From 5V/700mA electrical output that is produced, only reached 5.5V/7.89mA but it still can charge the battery. With a small current value, it takes longer time in battery recharging. It proved in the results of the comparison with the original mobile phone charger. For 5 minutes kinetic charging, the phone can be used for three minutes call or eight-minute stand-by. For 10 minutes charging , it can be used for six minutes call or 15-minute stand-by. And charging for 15 minutes can be used for the 11-minute call or 21-minute stand-by. With this result, kinetic charger can be used as an alternative way for emergency mobile charger.

Keywords: Mobile, Kinetic, Mobile Charger