## ABSTRACT

Handphone is an electronic device that can help communication needs. Handphone technology is experiencing a lot of rapid developments cause handphone battery power more quickly reduced. If this happens outside the home, the process of charging the mobile phone battery will be difficult when the PLN power source outlet is limited. Therefore, developed Repsoll, a tool made to carry out charging the phone by utilizing solar energy. To convert sunlight energy into electrical energy by using solar panels. Repsoll is made with several components including TP4506 module, inductive sensor, LCD, microcontroller, buzzer, relay, and USB charger module. To be able to start the process of charging the mobile phone, then must put the coins into the coin sensor container that has been provided.

From the test results obtained information with the Repsoll we can make the process of charging the mobile phone battery by using coins a thousand rupiah and Repsoll can reduce the use of electricity PLN.

Keywords: solar cell, mikrocontroller, inductive sensor, handphone.