

IMPROVED LED MODULE

ABSTRACT

An improved LED module that is thermally self-stabilizing, and that is able to be retrofitted into an existing flashlight is provided. In one embodiment, the LED module includes a light emitting diode, an amplifying circuit and a microchip. The amplifying circuit includes a temperature sensing device to sense heat from the light emitting diode. The output of the amplifying circuit is input to the microchip which output to a switching device that regulates energy that is delivered to the light emitting diode. The switching device may be part of a boosting circuit, a bucking circuit or an inverting circuit.

Figure 4A