**Technical Project Report**

**Title of Invention/Project:**

Band LED on and off pattern.

**Team Members/Inventors:**

|  |  |  |  |  |  |
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**Section - 1 ( IPR Related )**

**Brief Abstract:**

A LED wrist band is something every party fanatic would love to wear, LEDs are popular for their low voltage usage, rough-and-tough wear, different colors, logetivity, less energy wastage and small structure. We miniaturized the circuit to fit in to a wrist band which would be a great addition to a concert.

It is a low cost, rough-tough replacement for the normal glowing hand bracelet, we are eliminating the problem by using LEDs and using the sew-on button as an on and off switch. Additional modifications that can cater to improved solution would be the addition of LDR, which would automatically glow in the dark, addition of signal transmitter, would be very helpful for the damsel in distress, as it would send the coordinates of the user that would make it easy to pinpoint the location of the user.

**Existing state-of-art and drawbacks in existing state-of-art**

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| **S. No.** | **Existing State of art** | **Drawbacks** |
| 1. | Glow in the dark wristbands (<https://www.rapidwristbands.com/glow-in-the-dark>) | Needs sunlight exposure to glow in dark |
| 2. | Xylobands  ( <https://www.xylobands.com> ) | Expensive |

**Novel/Additional modifications that you can propose to improve upon drawbacks**

* We can add LDR to automatically make the lights glow when it's dark.
* We can add a SOS signal transmitter which sends the coordinates of the person.

**Advantages**

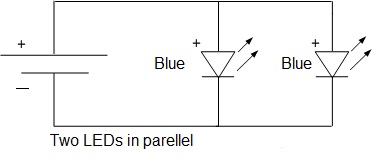
* We don't have to worry about switching the wristband on or off.
* A person in distress can be easily pinpointed.

**Section - 2 ( Real Project )**

**Materials:**

1. Wrist Band 1 x 50 /-
2. LEDs 2 x 2 / -
3. Wires 10 / -
4. Battery (3V) 1 x 10 / -
5. Battery Holder 1 x 10 / -
6. Sew-on Metal Buttons 1 x 20 / -

**Circuit Diagram**

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**Steps of Circuit Completion**

1. Making a normal parallel circuit with two same LEDs
2. Connecting the +ve terminal of the battery to a sew-on button. And doing the same with the -ve terminal.
3. Connecting the terminals of the LEDs to sew-on buttons
4. Sewing the wire and the components to the band.

**File Code**

**https://github.com/Southpark69/BEEE.git**