

Accident Protection Device

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Abstract

In today's world, mostly all the people driving motorcycle or bikes are in very hurry and drives their bike as fast as possible due to which most of the people have a road accident. The road accident may cause serious injuries to the rider or may lead to death. The present paper relates to an accident protection device. Moreover, this paper focus on the protection of motorcycle rider from an accident.

Keywords- road accident, motorcycle, bikes, rider, two-wheeler.

INTRODUCTION

According to the present data, nearly about 60% of the road accident occurs due to the driver who is riding two-wheeler vehicles either motor bikes or cycle[1]–[4]. In most of the cases the driver fails to survive due to severe injuries. The number of accidents is increasing every year. Generally, all the people who is driving two-wheeler is always in rush due to which the number of road accident take place. In road accident of motor bikes, it is very less change to survive as the injury is very deep. Therefore, is very important to protect yourself from these road accidents, for this in present lots of people wear helmets to save themselves during an accident but it cannot protect the rider face and other body part. The safety things which are developed today's are mostly installed in cars, trucks, buses and all the four wheelers. As a result, the person driving two wheelers die in road accidents[5]–[7].

Conventionally, large number of devices were introduced in past that protects the rider by alcohol detecting device or by any other means. But there is no such device which provide complete protection to the two-wheeler rider in case of undergoing an accident[8],[9]. Therefore, it is a basic need to develop a device which provide complete protection to the two-wheeler such as motor bike rider from road accident.

Working of proposed device

The proposed paper relates to a safety device for a driver and more particularly, the present paper relates to a device for safety of a person driving two-wheeler vehicle. The device comprises of a wearable suit which consist of large number of air bags that are expandable, multiple sensors are installed in the air bags for detecting any force during the riding, wherein the battery is provided for the purpose of operating the sensors and a hook is connected to the wearable suit for activating the air bags in case of failure of sensors.

The following are the key steps of working of accident protection device:

1. A suit containing airbags to prevent the driver from injuries caused during an accident.
2. An accelerometer to charge the airbags using piezoelectricity.
3. A hook to pull the trigger of airbags in the case of malfunctioning in automatic opening of airbags.

The block diagram of proposed device is shown in fig.1

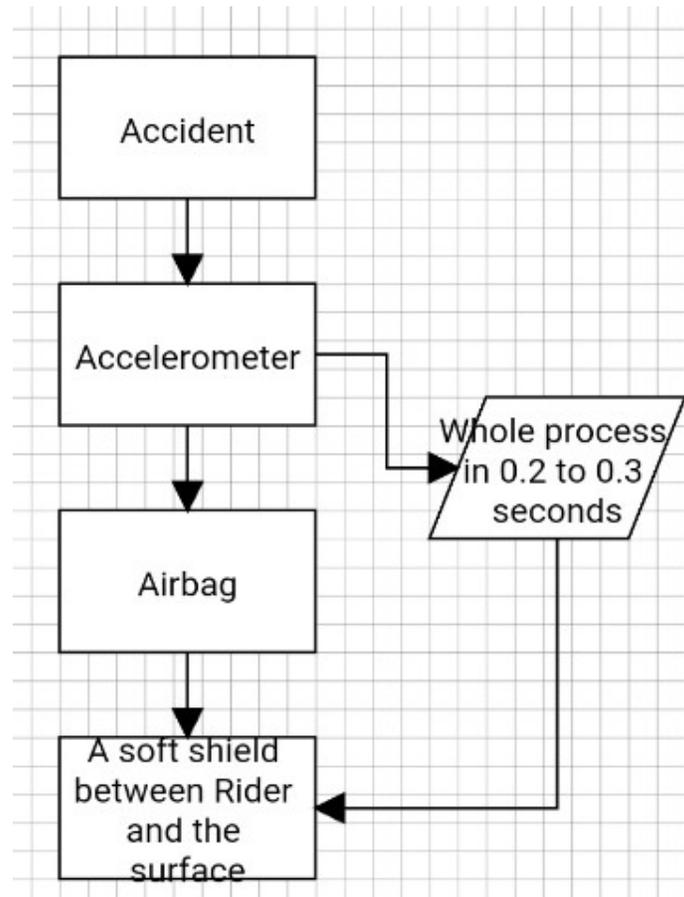


Fig.1 Block diagram of accident protection device

Conclusion

The Proposed paper relates to a safety of riders and more particularly to the safety of two-wheeler vehicle riders. The device disclosed herein comprises of a suit containing airbags to prevent the driver from injuries caused during an accident; an accelerometer to charge the airbags using piezoelectricity; a hook to pull the trigger of airbags in the case of malfunctioning in automatic opening of airbags. The device provide in the presented paper uses airbags to ensure the safety of the rider and hence saves the life of motorist or bike rider.

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