ACCIDENT IDENTIFICATION USING GPS AND GSM

ABSTRACT

Day by day man improving technology and introducing new technologies to make human lifestyle so simple, safety and secure. But still we have some problem whenever we face some sudden unexpected situation occurs like accident. We are losing so many lives because of delay in reaching the hospitals or intimating to ambulances. This project is designed to inform about the accident location that has occurred to concerned persons. The main application of this system is track the vehicle using the GPS modem. This modem gives the information about its position whenever required in the form of latitudes and longitudes. This is done with the help of the GPS satellite and the GPS module attached to the vehicle which needs to be tracked.

The Global Positioning System (GPS) is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilian use. GPS works in any weather conditions, anywhere in the world, 24 hours a day.

A GPS receiver must be locked on to the signal of at least three satellites to calculate a 2D position (latitude and longitude) and track movement. With four or more satellites in view, the receiver can determine the user's 3D position (latitude, longitude and altitude). Once the user's position has been determined, the GPS unit can calculate other information, such as speed, bearing, track, trip distance, distance to destination, sunrise and sunset time and more.

Whenever the accident occurs to any vehicle with any other vehicle or with something else, it will be detected by the limit switches, this information is sent immediately to the controlling unit i.e. to the ambulance using a GSM modem by. The provision to change the mobile number to which the message has to be sent is also provided in this system. A 16x2 LCD is also provided to display the location of the accident occurrence.
APPLICATIONS:

- Automobiles
- Transport
- School buses
- Government buses

BLOCK DIAGRAM:

POWER SUPPLY BLOCK DIAGRAM: