GPS based border alert system for fishermen with boat speedometer

In this modern, fast moving and insecure world, it is become a basic necessity to be aware of one’s safety. Maximum risks occur for fishermen in situations where they travel on a boat for fishing. In some situations they should not move after some point and they should not enter into other countries area. There is a real necessity in designing a system that can track the vehicle and send the information about the vehicle to the concerned person and alert the fishermen also.

The system that a function as a tracking and a security system has been designed that uses main underlying concept which is GPS (Global Positioning System). This system can deal with both place and security. The VMSS (Vehicle Monitoring and Security System) is a GPS based vehicle tracking system that is used for security applications as well.

The main application of this system is tracking the vehicle to which the GPS is connected, giving the information about its position whenever required and for the security of each person travelling by the vehicle. 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.

The GPS antenna present in the GPS module receives the information from the GPS satellite and it reveals the position information. This information received from the GPS antenna is sent to the controlling station where it is decoded. Thus, the complete data related to the vehicle is available at the controlling unit.

This information is sent to the owner or to the concerned person continuously using a GPS modem. This GPS modem has an antenna too. The information about the vehicle can also be displayed on LCD. If the person crosses the boarder then he checks the data coming from GPS and he alerted.

**SOFTWARE AND HARDWARE TOOLS:**

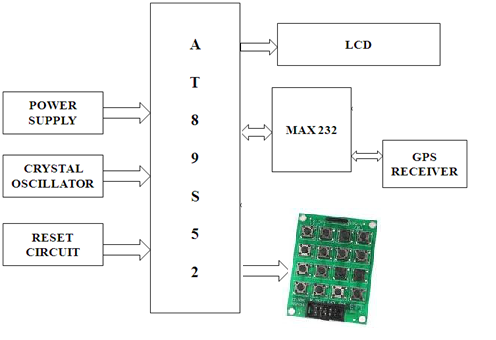
**Software Tools:**

1. Keil compiler
2. Orcad.
3. Proload

**Hardware Tools:**

1. AT89S52 Microcontroller
2. GPS Receiver
3. MAX 232
4. buzzer
5. LCD

**BLOCK DIAGRAM**

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