

Improve Vision of Travel System for Blind People

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Abstract---This paper intends to solve the problems of visually impaired persons for travelling in bus. Degradation of the visual system can lead to dramatic reduction of the mobility. So a visually impaired person faces many difficulties in their day to day life. One big challenge for them is to transport from one place to another. So we are making a device which makes travelling easier for them. It will help them to get information such as bus timings, routes and stations. Nowadays means the technology world which is day by day progressing fast has contributed many special devices for visually impaired person. So our system is gift for them.

Keywords: RFID; Bus; RFID tag; RFID readers; VIPs.

I. INTRODUCTION

There are more than 15 million *blind people in India*, according to a recent survey. Hence we make system which help to visually impaired person (V.I.P) in travelling and by using this system their travelling become comfortable like ordinary people. The visually impaired person will just have to enter his/her bus number with the help of keypad (here we have assumed that he/she already knows the bus number) which is repeated through speaker. With the help of R.F. module, the communication takes place which will communicate with centralization where the travelling information is already stored and the required information is given back to the visually impaired person through speaker so that their travel becomes easier. While at the same time the driver of the bus will also get the information that a visually impaired person is going to travel on that particular bus so he will be aware of it. The buses will also consist of a system which will continuously inform the next station and present station. By using this system the normal person will also have an advantage of knowing the present station of the bus.

II. DESCRIPTION

The block diagram of system is shown in figure 1.

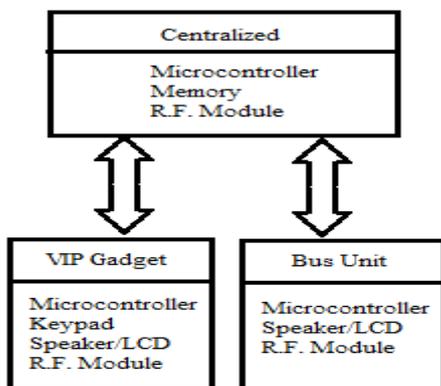


Fig. 1: Block Diagram of system

The centralized unit uses wireless communication by which it tracks the VIPs and gets information about their current location and the bus they want to take.

Figure 2 described the steps that the VIPs will do to find the bus they required. First of all, the visually impaired person (V.I.P) dials the bus number which is already known by VIP with help of keypad. The dial number is automatically removed in few seconds from keypad. This information is given to centralized unit (CU) via RFID module. One type of system is present in this bus which announced about the present station as well as upcoming station via loudspeaker. This system is also useful for ordinary people.

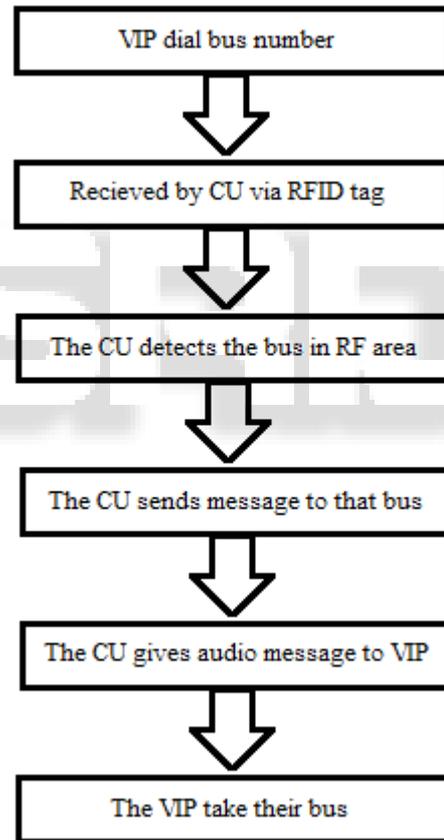


Fig. 2 : Steps performed by VIP to find bus.

III. EXPECTED OUTCOME

The blind people should be get information like bus timing, route for particular bus by our device to reach at his/her destination station.

IV. ACKNOWLEDGEMENT

It is honor and pleasure to express my heartfelt gratitude to those who helped me and also contributed towards the preparation of this paper. We are indebted to our Prof S.V.BHURIYA whose invaluable guidance and timely

suggestion and constructive encouragement inspired us to complete the paper in the present form. We express our thanks to the Library of Government Engineering College Bharuch Which is a source of such invaluable information and of course the Internet Facility of the same.

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