Friday, February 13, 2009

The new virtual media player/GPS enabling the blind to safely enjoy music or audio books while traveling. First off, this unit would consist of an iPod or iPod-like player. Installed would be a virtual guided GPS with a small square button on the face of the unit. This would enable users to find accurate locations as to their whereabouts and at street crossings, a voice would interrupt the playback of the music or book providing information to the user to the activity on the street with the guided censers focused on the walk/do not walk signs and traffic lights. In addition, for those looking for information on location as to the whereabouts of mass-transit the unit will be capable to identify platform location and subway line information in a populated area.

For example, if you are positioned at the number six train platform in New York City, the unit would be able to inform you as to your location, direction IE up-town, cross-town, or down-town. This would all be done in a timely manner before one is near the edge or florescent lights where safety could be compromised.

In addition when one is in major transit hubs, the unit would be able to identify when one is descending or ascending from one area to another. For example, if one is approaching a staircase to descend to multiple modes of transportation, the unit would identify that the person is heading in the direction of transit routes X, Y, Z etc. The unit would inform the user that transit lines X, Y, and Z are either rail-lines or bus-routes. In addition, as one approaches individual routes, the unit would identify the direction of each route and the location of the route to the unit. For example, the unit could say something to the affect of “approaching transit lines A, B, C.” When one descends, or ascends to these routes, the unit could announce that transit line A is fifty ft away. You are facing east. Proceed to the north by turning left. Stay in this direction and proceed fifty feet. When one is required to either ascend or descend to the transit line A, the unit would inform you that you are about to approach the said transit line. The person can make his/her own independent choice as to what direction they want to proceed in. Finally when one proceeds in their desired direction, the unit would stop informing them of such information. If they delay, the unit would give them other choices as to the direction on the transit line that they could take. In the example of transit line A, the unit could give the alternative choices to go either east or west to destination… or destination... The user would have to know where they want to travel to and how to arrive at their destination.

If one is at a street corner, the unit would be able to inform the individual as to the direction traveling; the location of one’s whereabouts IE location is on north-east corner of Street and cross-street. Satellites positioned for driving GPS units are already in place making this task easy since general talking GPS’s are on the market. This would add a small feature to work underground in subways and to help those navigate safely in unfamiliar traffic patterns where audible traffic lights are unavailable or traffic patterns are difficult to learn. The voice system would announce that one could cross in the direction they are facing when the light is in ones favor. In addition, the unit would be able to reposition itself when one changes direction from one corner to another in a congested area such as New York City.

One last feature would be to add a “where am I feature.” This would enable one to be told the address they are in front of and the position of the buildings entrance and the cardinal direction of the street IE South side of 5TH place. This feature could be activated with a small button on the unit’s side that when activated, an image could be gathered of the location to provide the necessary feedback. With this said one could stand within a distance of the location and press the button to here the feedback interrupting the current activity of the player. The activity would resume once the information was provided. Secondly, if the building in question was out of range, the unit would inform the user of such information telling them to move closer. When they move in the proper distance near the building, the unit would tell them to re-capture the image by pressing the “where am I button.”

In order to create this unit, existing technology would be used from traditional GPS navigation systems, traditional speech output, and in the case of the image system, an image create or plug-in would be added in a feature running on a platform of the traditional camera found on a mobile telephone.

Lastly, this unit would not only benefit the blind population, it would benefit the elderly as well as those individuals who have other print reading disabilities. In addition, the average person could benefit as a result of the features and their own personal safety. People become overwhelmed and consumed that they do not even become aware of what is in front of them until they have to make a sudden harsh decision.