1. Introduction

Nowadays, the strong developments of technology and society lead to the requirements about an easy and comfortable life. After many hard working hours, people get tired and stress from their jobs. Therefore, they surely need entertainments to relax. In fact, listening music is a good way chosen by many people.

Today, people control the music player by a remote controller in the case of music devices or mouse and keyboard in the case of computers. It means that they always need a music controller or they have to sit near the computer all the time when they listen to music. Is it good if we depend on a device or continue to relate to the computer after tense working hours to listen to music? The answer is "No". To make people feeling more comfortable and more interested in listening to music, "Magic Hand" is created.

2. System descriptions

"Magic Hand" is a soft-ware that allows people to control the "Windows Media Player" software without remote controller or keyboard and mouse. "Magic Hand" uses a camera or a webcam connected to a computer to capture user's hand gestures or motions and convert them to commands of "Windows Media Player".

Our system operates as follows. (Fig. 1)

A. User makes pre-defined hand gestures and motions to control the "Windows Media Player".

B. The camera will capture the hand gestures and motions. Our program analyzes the data received from the camera to recognize patterns of hand gestures and motions

C. The recognized patterns of hand gestures and motions are converted to the commands of Windows Media Player for control.

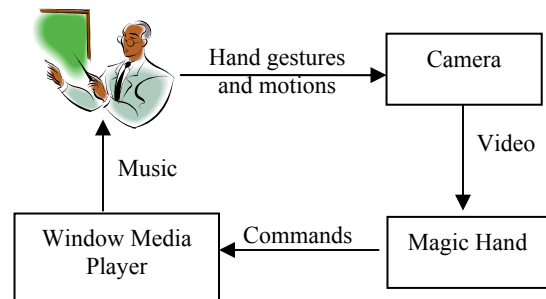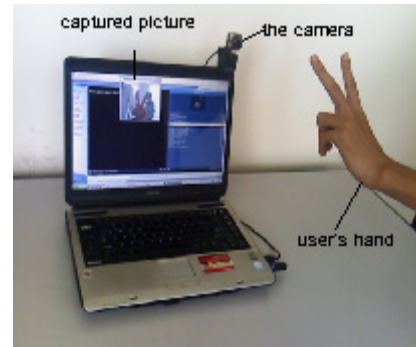The hand gestures and motions used to control "Windows Media Player" are simple and easy to remember.

Fig.1 Overview of "Magic Hand" system

3. Conclusions

In conclusion, our system provides people a comfortable and interesting way to listen to the music. It captures user's hand gestures and motions, and converts them to software commands. Hence, without sitting near the computer all the time, users can do other things such as reading a book…so that they can relax in their best way.