**DESIGNING THE HAPTIC INTERFACE SYSTEM FOR THE DISABLED INDIVIDUALS**

**AIM:**

The main aim of this project is to design the haptic interface system for disabled persons.

**PURPOSE:**

The purpose of this project is people who are not able see if they want control any appliance. They need have some sort of sign which they can able to remember and by which they control the appliance, if they have any that kind of equipment so they can control appliances very easily. Here we are design touch pad based system people need to give their touches to control.

**BLOCK DIAGRAM:**

**MICRO**

**CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**DIGITAL**

**TOUCH PAD**

**LCD Display**

**DEVICES**

**Power Supply:**

**Step Down**

**Transformer**

**Bridge**

**Rectifier**

**Filter**

**Circuit**

**Regulator section**

**DESCRIPTION:**

Hap-tic Technology refers to technology that interfaces to the user via the sense of touch by applying forces, vibrations and or motions to the user. Hap-tics are gaining widespread acceptance as a key part of virtual reality systems, adding the sense of touch to previously visual only solutions. Most of these solutions use stylus based Hap-tic rendering, where the user interfaces to the virtual world via a tool or stylus, giving a form of interaction that is computationally realistic on today’s hardware.

This mechanical simulation may be used to enhance the remote control of machines and devices. This emerging technology promises to have wide reaching applications. Hap tic technology has made it possible to investigate in detail how the human sense of touch works, by allowing the creation of carefully controlled Hap tic virtual objects. These objects are used to systematically probe human Hap tic capabilities.

It is difficult for the disabled to directly control the appliances present in a home. So we are coming up with the solution such that he can control all the appliances by sitting in his chair.

The present project is based on 89s51 microcontroller. Here a touch pad is interfaced to the micro-controller to receive input from the user. The signal is given to the microcontroller to complete the desired task.

**HARDWARE COMPONENTS:**

* Microcontroller(AT89S52)
* Power supply
* Digital Touch Pad
* LCD DISPLAY
* Devices

**SOFTWARE TOOLS:**

* Keil
* Embedded C
* ISP

**APPLICATIONS:**

* Can be very for physical disabled person wants control
* And more flexible way of control the device for general people even

**RESULT:**

By using this project we can implement the hap tic interface system for disabled persons.