

5 Pen Pc Technology

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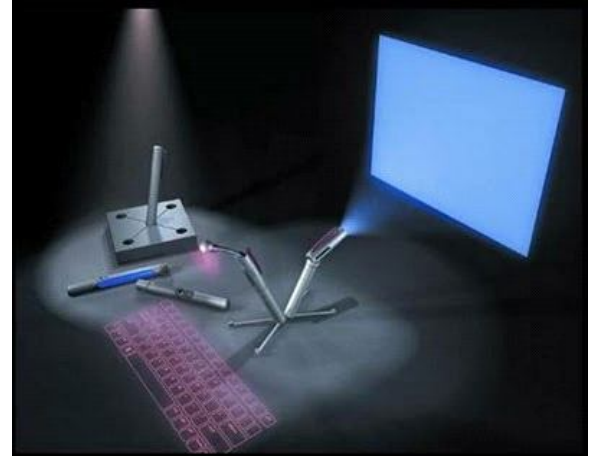
Abstract- In present days, we use normal pen and paper to write a note. Using 5 Pen Pc technology we can get a digital copy of handwritten note and also send it to digital devices using a wireless technology. 5 Pen Pc technology is new invention in pen computing field. 5 Pen Pc technology consists of 5 Pen like devices which provide functions such as CPU, camera, communication function, virtual keyboard, and Led projector. These 5 pens are connected with each other to internet mainly via wireless technology (most likely bluetooth). Pen-Style Personal networking Gadget Package is another name of 5 Pen Pc technology and in short can be called as P-ISM.

Keywords- Bluetooth, camera, CPU, projector, communication pen, virtual keyboard.

I. INTRODUCTION

Today computer has become major part of our daily life than most of us might have thought. Using a computer software had turned out to be a compulsory requirement in most professions. Engineers are trying to make computers and their software as compact and user friendly as possible. In this 21st century everyone is able to use modern IT without being expert. 5 Pen P technology is also known as P-ISM in short and was developed by a Japanese company NEC(Nippon Electric Company,Limited).Since its a new discovery it is under developing stage.It was designed by Tour Ichihash. P-ISM was featured during a ITU Telecom World exhibition held in Geneva,Switzerland.5 Pen Pc technology has made things easier and convenient to use. The main aim of developing this technology was to allow use of office anywhere. This technology has a great impact in the field of computer and the discovery of it was made in the field of computers in association with communicating field.

P-ISM are computers which are in the shape of different pens where each of them has unique function of their own. When these are combined they give usage of a complete computer in compact size. The five functions of P-ISM gadget are: CPU pen, projector,virtual keyboard, camera and communication pen. In P-ISM all are connected to each other using a short range wireless technology such as Bluetooth or Wi-Fi. A block is used to hold the mass storage and also to recharge the batteries of all the 5 pens.



II. HARDWARE COMPONENTS OF 5 PEN PC TECHNOLOGY

CPU pen:

The major part of this innovation is CPU pen. It goes about as a focal gadget which associates all other pen gadgets. It performs capacities like the focal preparing unit of a PC or a work area since it is a calculation motor which handles all the preparing and figuring errands. Operating system is as of now pre-loaded in this pen and it can't be modified. It is embedded with dual core microprocessor chip and works on windows OS. Regardless of whether the CPU pen bolsters USB is still in question.

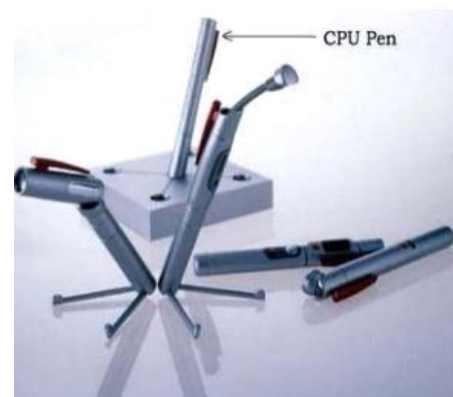


Fig.1 CPU Pen

Communication pen:

Communication pen is used to establish the communication among all other pens. This pen has a built-in cellular phone function that is used to connect the entire set through the wireless technology like Bluetooth thus becoming capable of performing all web related tasks. This pen poses same functionality that of a mouse. This pen will assist the client with interacting with data that is anticipated by the projector pen. It uses Tri-wireless modes for connection (Bluetooth, 802.11 B/G and cellular). The frequency band used is 2.4 GHz.



Fig.2 Communication Pen

Projector pen:

Projector pen functions as a regular projector. Its most extreme display resolution is 1024x768 pixels that displays a top quality picture. It ought to be anticipated on a level surface for better client experience and its clearness relies upon the separation between the projector pen and the anticipated surface. More noteworthy the separation between the two, less will be its clearness. It works in mix with correspondence pen and camera pen. This pen can be attached to a stand for a firm projection on level surface. The size of projection is A4. LED projector that is used for visual output of computer can be obtained using this pen.



Fig.3 Projector Pen

Camera:

Pictures and recordings can be saved using this pen as it contains advanced camera. Besides that, it can likewise work as a web cam which is used for web related applications, for example, video conferencing, Skype and so forth... Additionally, this pen is also used for facial acknowledgment. since the camera can pivot 360 degrees, movement sensors inserted in the pen helps the camera to consequently alter. It interfaces with other gadget like correspondence pen, projector pen through remote innovation like Bluetooth and wi-fi. Utilizing this pen we will find out about encompassing environment and gathering to assemble correspondence with around show and focal excessively wide edge camera.



Fig.4 Digital Camera Pen

Virtual Keyboard:

This pen capacities like the LED projector pen. The laser pen radiates a laser console on a level surface which appears as though the console is having a course of action of QWERTY. The information is perceived by the gadget when the keys are composed on the laser console. Its capacities are practically like those of the PC console or the on-screen console.

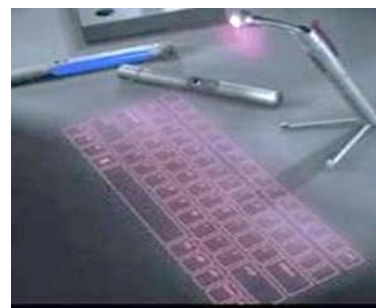


Fig.5 Virtual Keyboard Pen

III. WORKING OF THE P-ISM

A PC that functions as an electronic pen is referred to as stylus rather than a support for input. Pen PCs generally require novel working system that sponsorships with the objective that customers can make on the screen or on the tablet instead of a composition on a console. 5 Pen PC

innovation are hand held gadgets and also they are too slight size console. It will use the camera or a virtual support that is made on level surfaces and it makes usage of electronic discrement innovation(EPT) for taking commitment from the customer. AN EPT is a negligible exertion chip and it will make a laser or lighting that engages electronic parts to outline a 3-d guide of their condition and see what their customers are doing.

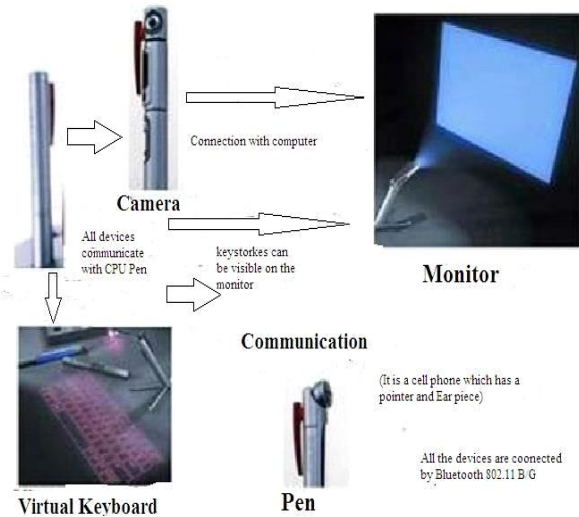


Fig 6: Block Diagram of 5PC Pen Technology

IV. MERITS AND DEMERITS OF THE TECHNOLOGY

Merits:

1. It is simple to utilize as a result of minimal size.
2. Its very handy and also advantageous.
3. It even has a great flexibility.
4. The display size can be changed by the prerequisite.
5. It utilizes less interior and outside space.
6. It has a great battery life of about fourteen days

Demerits:

1. This technology is quite expensive.
2. We are yet unsure about it. It can be easily misplaced.
3. Projection surface ought to be level for ideal utilization.
4. Since we use Wi-Fi and Bluetooth technology we are constrained to short range.

V. APPLICATIONS AND FUTURE WORK

5 Pen PC Technology has a fingerprinting that makes contraption models secure which empowers only owner to get to the PC. So regardless of whether we lose it, nobody else can get to the device. Security is kept up by giving an ID confirmation of a proprietor and unique finger impression

scanner previously introduced in a pen. So just by pressing or contacting the proprietor can play out the whole assignment.

The data about the P-ISM technology isn't yet made open. Regardless of whether it will be accessible for the open use is as yet an inquiry, on account of its unnecessary cost of 30,000\$. The model created by the organization demonstrates that the making of such complex innovation is possible, but since the absence of data about its ongoing turns of events, it is hazy what the organization's expectations are about this innovation.

VI. CONCLUSION

The size of the communicating devices are reducing by each passing day. This is just a model for the beginning of this new innovation. In near future we can get more such improvements. Ceaseless headway in innovation has acquired numerous progressions in the field of PC and correspondence. The association between the most recent innovation and human has been envisioned as a pen. The structure idea here utilizes five distinct pens to make a computer. PC have been brought into the pocket due to this technology. It can be most likely incredible discovery if it gets general among individuals and change individuals' view about PCs.

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