

E-Ball- a Complete Computer in a Ball

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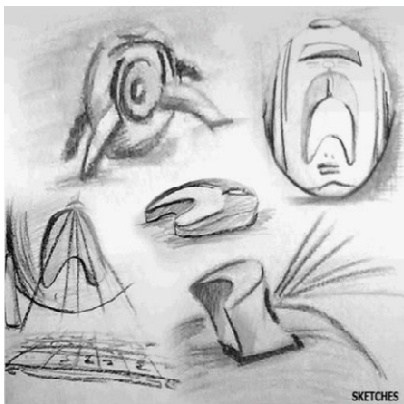
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Abstract:-Today's technology is at its peak point beyond what we could ever imagine. New inventions and innovations are emerging on daily basis. No one would have seen such amazing thing before. This ball computer has taken the computer technology to new horizons. You may have seen many other inventions of this kind but what is unique in it is that when it is closed no one is able to guess that this ball contains a whole computer inside it. When you will open you will find a complete set which includes display screen, virtual keyboard and a mouse. This is known as E-Ball which is designed by Apostol Tnokovski. He was aiming to create the smallest PC in the world when this idea comes in his mind. E-ball is basically a new technology laptop which is designed to increase the ease of portability and working without compromising any hardware like keyboard, mouse, hard disk space. It is the smallest model of this new era.

Introduction

A new concept of pc is coming now that is EBall Concept pc. The E-Ball concept pc is a sphere shaped computer which is the smallest design among all the laptops and desktops.. The E-Ball is a sphere shaped computer concept which is the smallest design among all the laptops and desktops have ever made. This PC concept features all the traditional elements like mouse, keyboard, large screen display, DVD recorder, modem, webcam, LAN, WLAN, projector etc., all in an innovative manner which behaves like a normal desktop computer.



E-Ball is designed to be placed on two stands, opens by simultaneously pressing and holding the two buttons located on each side. After opening the stand and turning ON the PC, pressing the detaching mouse button will allow you to detach the optical mouse from the PC body. This concept features a laser keyboard that can be activated by pressing the particular button.



SIZE OF E-BALL COMPUTER

E-Ball is very small, it is having only 6 inch diameter sphere. It is said as 160mm round sphere. It is having 120x120mm motherboard. It is spherical in shape as designed by Tnokovski. It is admirable by everybody and it is attractive which is portable. It possess a holographic display.



ELEMENTS OF E-BALL COMPUTER

The main features of e-ball computer are virtual keyboard (wireless laser keyboard), optical mouse, projector and a paper holder.

VIRTUAL KEYBOARD:

A virtual keyboard or wireless laser keyboard is also known as virtual keyboard which is a projection keyboard that is projected and touched on any flat surface. Virtual keyboard basically uses the principle of sensor technology an artificial intelligence to let users word on any surface. Whenever you press the keyboard button, it is projected optically on the flat surface and, as the user touches the image of the key, the optical device detects the stroke and sends it to the computer. The advantages are ability to minimize the risk for repetitive strain injuries, portability, accuracy and lack of need for flat or large typing surface.

1. 1.) THREE COMPONENTS OF VIRTUAL KEYBOARD:

There are three components in virtual keyboard they are: sensor module, IR-light source (Infra-red light source) and pattern projector.

1.2) WORKING OF VIRTUAL KEYBOARD:

Keyboard that a user operates by typing (moving fingers) on or within a wireless or optical-detectable surface or area rather than by pressing physical keys. Two technologies are used. In one technology, the keyboard is projected optically on a flat surface and, as the user touches the image of a key, the optical device detects the stroke and sends it to the computer. In another technology, the keyboard is projected on an area and selected keys are transmitted as wireless

signals using the short-range Bluetooth technology. With either approach, a virtual keyboard makes it possible for the user of a very small smart phone or a wearable computer to have full keyboard capability. Theoretically, with either approach, the keyboard can be in space and the user can type by moving fingers through the air!

1.3) USAGE OF VIRTUAL KEYBOARD:

When connected to your handheld computer it is more convenient to carry around than your laptop. It takes up less desk space than a conventional keyboard. You could use it with your desktop, laptop or handheld computer.



2.) PROJECTORS:

E-ball uses LCD projectors. LCD stands for Liquid Crystal Display. LCD projectors are systems that display or project information or video onto a flat surface. Video signals are comprised of three colors: red, green and blue. LCD projectors contain a separate glass panel for each. Each panel consists of two plates of glass with a layer of liquid crystal between them. When a charge is applied the crystals open to allow light through or close to block it. This opening and closing of pixels is what forms the image. Metal halide lamp is emitting the light. Series of dichloric filters are separates light. 3 polysilicon panels placed in red, blue, green colors. LCD technology is used by many manufactures such as Epson, Hitachi, and NEC. The advantages are it is generally more light efficient and can project bright, vivid images with a low output lamp. LCD trends to produce a sharper image. One benefit of LCD is that it controls red, green and blue colors independently.

2.1) DLP PROJECTOR:

DLP states Digital Light Processing. World's only all-digital display solution. DLP technology is based on semiconductors called DMD chips. DMD chips made up of many tiny mirrors. Current DMD chip can produce 1024 shades gray. There are two primary methods by which DLP projection systems create a color image, those utilized by single-chip DLP engine, and those used by three-chip-engine. In projection cube industry, most manufacturer uses single chip technology. The advantages are high contrast, less screen door effects.



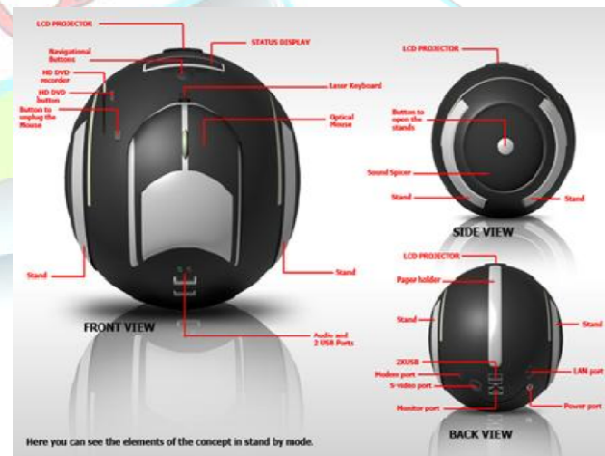
V.WHY NEED OF E-BALL COMPUTER?

E-Ball computer work very easily while you are making video presentation, listening music watching large screen movies, and chatting on the net. The software interface of E-Ball concept personal computer is highly stylized with icons that can be remembered easily that support all types of windows operating system. . It has all the components that a conventional PC has.

IV. HARDWARE SPECIFICATION

The e-ball computer has hardware specification as follows:

- It has around 350-500GB of hard disk.
- It contains about 5GB of RAM.
- It has about 2*50 Watt speakers and HDDVD recorder.
- It has integrated and sound card.
- It has enhanced with dual-core processor.
- It contains wireless optical mouse, i-tech virtual keyboard an LCD projector.
- It has LAN and WLAN card and modem.
- LCD projector paper holder.



VI. WORKING OF E-BALL

E-Ball is designed in a way that it can be fixed on two stands. E-Ball possesses two buttons each side and the users can simply open it by pressing and holding them simultaneously. Once you open the stand and turn the E-Ball on, you can detach the optical mouse from the body of the E-ball by simply pressing the detaching button of mouse. This technology has a particular button that allows its laser keyboard to get activated. **E Ball concept** pc don't have any external display unit, it has a button when you press this button a projector will pop and it focus the computer screen on the wall which can be adjusted with navigation keys. When we are working in an open place we can make use of a paper sheet as a screen. paper sheet holder is placed at the back panel. The holder can be opened by pressing it in the lower part. Also, the E-Ball PC supports a paper holder and the paper sheet on the holder could act like a screen where you can watch movies or something.

IF THERE IS NO WALL:

Suppose, there is no wall in the place where you use E-Ball, you can use a paper sheet provided with the PC. When you pop out the projector, the paper sheet holder will be divided into three pieces like an umbrella and you can see the desktop on this sheet. You can even watch movies or any other thing on the paper sheet that is held by the paper holder of the E-Ball PC.



VII.

WHAT MAKES E-BALL SPECIAL AND PREFERABLE?

The drawbacks of ordinary computers such as large size and ugly shape may be the factors that force Apostol Tnokovski, the designer of E-Ball PC, to make the smallest PC in the world. According to the opinion of Tnokovski, the sphere is the best shape of the E-Ball PC as it can draw the attention of people soon. As this technology is so small, you can easily carry it around by packing it into a ball. Moreover, it possesses a holographic display and optical keyboard so that you need not find space for physical monitor and keyboard.



VIII. ADVANTAGES OF E-BALL

E-ball computer is portable and hands free.
It is easier to use.

More Secure than other computers and supports user-defined keyboard layouts. They have greater speed and large memory.

- It is very useful for making the video presentations

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XI. CONCLUSION

As years passes, the computer size is becoming smaller. Our imaginations have dressed into reality and today it has become possible to have a whole computer in our pocket all the time. The wide popularity of e-Ball among people emphasize the

importance of technology.

