

Spherical Shaped Computer Named As E-Ball

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Abstract:

In olden days, the computer occupied a large place to do one operation at time. Now the technology is at its peak point that we could ever imagine that a Computer in a spherical in shaped. A 6inch diameter sphere it is very small, occupied less place and can do all operation like normal computer. It is named as E-BALL. Thus, the E-BALL is designed by APOSTOL TNOKOVSKI. The E-BALL is similar to the basic computer. The features of E-BALL are laser keyboard, optical mouse, large screen display etc. This is the smallest PC among all the laptops and desktops. The E-BALL can be open by pressing and holding the two buttons simultaneously which located on each side. The E-BALL is useful in video presentations if there is no wall using paper sheet holder we can place a paper like screen. This paper is to change the height of the paper sheet holder at three stages normal(short), medium and larger.so that user have a convenience to adjust the paper sheet holder so it will be correct view to the eyes. This may help the user to reduce the irritation of eyes and avoid the neck pain while working the e-ball PC and feel relax to work. The cost of e-ball is high

Keywords

E-Ball, sphere shape, smallest PC, laser keyboard, LCD projector.

1. Introduction

The E-BALL PC is introduced by APOSTOL TNOKOVSKI, a 31-year-old. This is a sphere-shaped PC like a ball. If there is no knowledge about the E-BALL it seemed like a ball, no one knows that it is a computer. The E-ball is designed like a sphere-shaped ball PC. This PC having all features like a traditional computer like mouse, laser keyboard, LCD display, etc. E-BALL PC is designed to be placed on two stands which can be opens and closed by pressing and holding a

particular button on each side. E-Ball PC do not have any external display unit, it has a button when press this button a projector will pop and it focus the computer screen on the wall which can be adjusted by navigation key. If there is no wall, to overcome this situation it has a paper sheet holder which is divided into three pieces like an umbrella after popping up, and it then show desktop on the paper sheets. It has wireless optical mouse, laser keyboard and LCD projector.

It has approximated 350-600GB of Hard Disk Drive. It has 5GB RAM. It is very comfortable to carry over anywhere, because it is very small in size and easy to carry everywhere. The E-ball PC supports all the windows operating system. The work with this PC is easy when the user making a presentation, watching a movie with family and chatting with the friend on the net [2]. The core thing when using a virtual keyboard is that you need a smooth surface; otherwise you don't understand how you will be able to use it.



Figure 1: E-Ball

1.1. Features of E-Ball

E-ball is very small, it having only 6-inch diameter sphere. It is said at 160mm round sphere. It has 120*120mm motherboard.

Virtual keyboard: A virtual keyword or wireless laser keyword is called as virtual. These three components are sensor module, IR-light source (infra-red-light source) and pattern projector.

Hard Disk Drive: It is a secondary storage device. It is non-volatile in nature. The E-Ball PC has a 350-500GB hard disk drive.

RAM: It stands for random access memory, volatile memory, storage device but data is not store permanently, the e-ball PC has 5GB of RAM.

LAN and WLAN card: Using this card user can connect an internet connection to the E-ball.

Projector: There are two projectors are used in this e-ball:

- LCD (liquid crystal display)
- DLP (digital light processing)

1.2. Working of an E-Ball

E-Ball is started by pressing two buttons and holding them at a time simultaneously. E-ball can be placed on two forms. After opening the e-ball stand and turn the e-ball on then detached the optical mouse and connect with e-ball by simply pressing the connecting button of mouse. To activate laser keyboard, press the activate button for keyboard. The E-Ball PC don't have any external display unit and it has button when the user presses a button the projector will pop up and focus the screen on the wall.



Figure 2: working on E-Ball

1.3. If there is no wall

While working in e-ball if there is no projector is available then we can make a paper sheet as a screen using a paper sheet holder [5].

The paper sheet holder can be activated by pressing a particular button. The holder can be opened by pressing it in a lower part of PC [5].

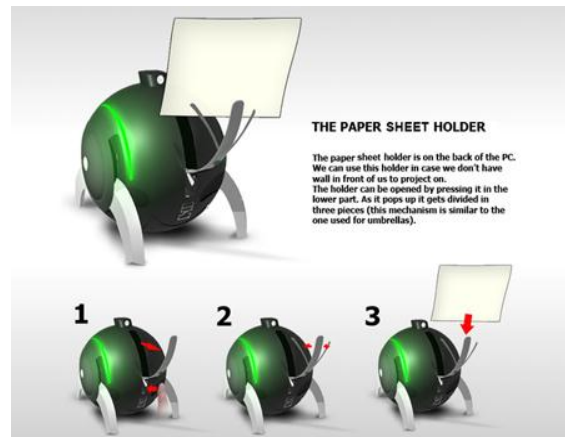


Figure 3: if there is no ball

1.1. Structure of e-ball

From the below picture there are three views of e-ball [6].

FRONT_VIEW: The front view has LCD Projector, status display, navigator button, HD DVD recorder, HD DVD button, Laser keyboard, button to unplug the mouse, optical mouse, two stands, audio and 2USB ports.

SIDE VIEW: The side view of e-ball has LCD projector, button to open the stands, sound Spicer and two stands.

BACK VIEW: The back view of e-ball has LCD projector, paper sheet holder, modem port, LAN port, S-Video port, power port and monitor port.

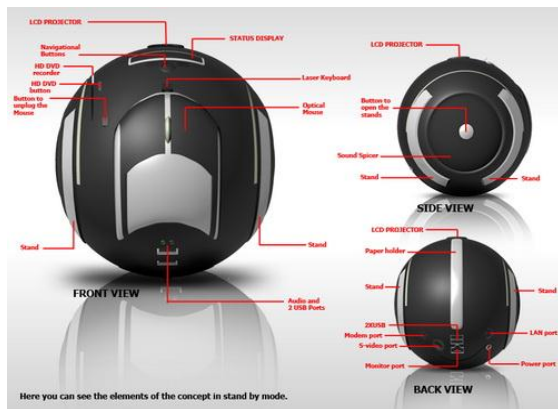


Figure 4: Structure of E-Ball

1.4. Scenarios of use:

The e-ball can be used in working in office, making video presentation, watching movies, listening music, chatting on net.



Figure 5: Scenario

2. Existing system

In generation of computer we can see many types of computer. The e-ball is one of the new concepts PC as introduced and it is very small in size. It has all features like normal computer. E-Ball is mostly used for video presentation, listening music, watching large screen movies and chatting on the net. If there is no wall we can place a paper and in the paper sheet holder for the screen. There is a virtual keyboard user can change the user define language and avoid of irritation to fingers and also avoid repetition. The software interface of e-ball concept is very stylized with icons that can be remembered easily. This icon supports all type of windows OS.

2.1. Disadvantage:

- The cost of E-Ball is very high so it is unable to reach all people.

- Difficult to understand if any Problem occurs in e-ball.
- The virtual keyboard is that you need a smooth surface; otherwise you don't understand how you will be able to use it [4].
- The paper sheet holder is small in size so it is difficult to view the PC correctly.

3. Proposed system

The e-ball is 6-inch diameter in sphere, it has all features like normal computer like mouse, keyboard and do all operation like normal computer. It is strange to call this device a computer, because it is very small, but it doesn't lack any hardware part and tends to be a future machine found in any house or office [4]. The projector is use to display in a wall, if there is no wall using paper sheet holder we can place a paper and used as screen. The e-ball is very small so when we place a paper also it may be difficult to view the screen, so it can change the height of the paper sheet holder in two stage medium and large size in correct view to eyes.

3.1. Advantages:

- So that the paper sheet is easy to view to the people.
- This may help the user to reduce the irritation of eyes.
- Avoid the neck pain while working the e-ball PC.
- Feel relax to work.
- User can adjust the paper sheet holder to their convenience.

Stage 1 for short person can use, stage 2 for very height person can use

Methodology

The e-ball is 6-inch diameter in sphere. The projector is use to display in a wall, if there is no wall using paper sheet holder then user can place a paper and used as a screens. The e-ball is very small when they place a paper; even though the user places a paper they feel difficult to view the screen. According to that, the height of the paper sheet can be change in correct view of the eyes. Then adjust the LCD display in rotate manner. According to three steps the paper sheet has, normal, medium, large. This paper is just updating the paper sheet holder. This may help the user to reduce the irritation of eyes and avoid from neck pain and also feel relax to work.

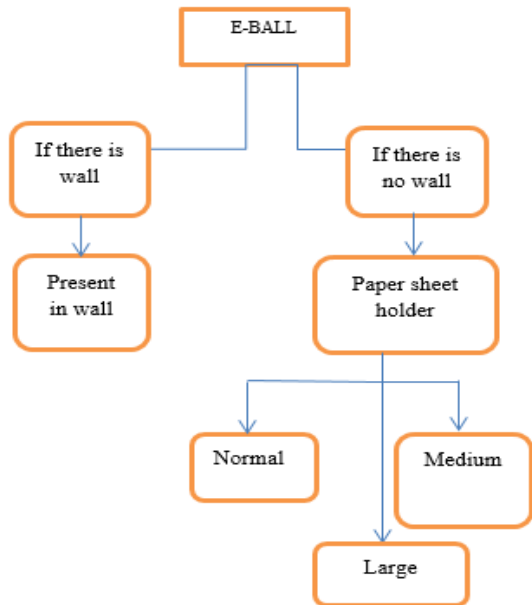


Figure 6: methodology of E-Ball

- Normal stage: it has a normal height like exiting system.
- Medium stage: it will be little bit larger than the normal stage.
- Large stage: to avoid neck pain the taller people can use this stage.

4. Implementation

As I updating the paper sheet holder into the three stages of e-ball are:

NORMAL STAGE: It has a normal height like exiting system.

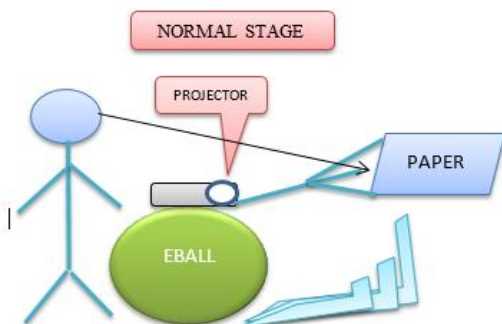


Figure 7: Normal Stage

MEDIUM STAGE: It will be little bit larger than the normal stage.

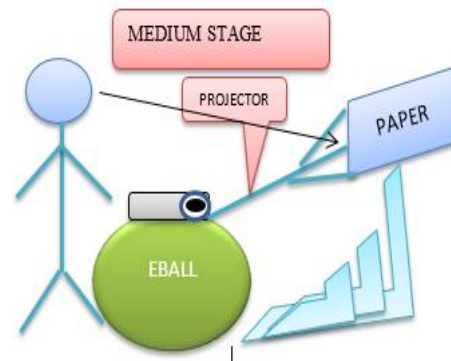


Figure 8: Medium Stage

LARGE STAGE: To avoid neck pain the taller people can use this stage. Adjust the LCD projector in correct view to paper sheet holder.

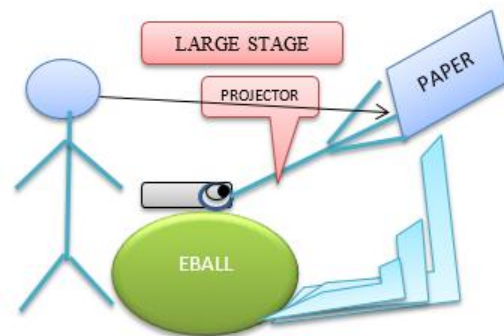


Figure 9: Large scale

5. Result

The e-ball is very advanced technology in the world. The e-ball is a computer but it is not like normal PC, it is totally different. The e-ball is sphere shaped computer which is the smallest design among all computer and the laptops. It has all features like traditional computer like keyboard, mouse and DVD. The LCD projector is very useful in video presentation, if there is no wall using paper sheet holder user can place a paper like a screen. The three stages of development of paper sheet holder in the e-ball are very useful in future. The three stages are normal stage, medium stage and large stage. It can be able to adjust according to the user convenience.

6. Future scope

It can be used in high-tech and industrial sectors, used with smart phones, PDAs, email, word processing and spreadsheet tasks, also in operation theatres. It can be PDA input as computer, Also in gaming control and TV remote control.

7. Conclusion

Computer technology is used to connect people and to serve people. Now everybody using the computer for their daily needs like shopping, money transaction, ticket booking etc. As years passes the computer size is becoming very smaller. Today technology is at peak point what we could ever imagine that. New inventions are more welcome. People's having whole computer in pocket all the time. This e-ball PC has taken the computer technology to the new horizons.

8. Acknowledgement

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9. References

- [1] Assistant professor Manikandan student M. Valarmathi, C. Malathy-3ECE, "E-BALL- a complete computer in a ball", VSA group of institution year 2016
- [2] Shivani Patil UG Student, Dept. of Electronic & Telecommunication Eng., PRMCEAM, "Upcoming Computer Technology: E-BALL" Amravati University, Bandera, Maharashtra, India year 2016
- [3] NEHA KUMBALPURI, "E-Ball Technology", EXTC Department
- [4] Ashvini M. Bharambe, "Review paper on E-Ball Technology", Department of Computer Science and Engineering, Shri Sant Gadge Baba College of Engineering & Technology, Bhusawal, Maharashtra, India
- [5] Authors Dr. Pradeep M. Jawandhiya, Priya A. Parhate "E-Ball - The Smallest Computer" Department of Computer Science and Engineering, Pankaj Laddhad Institute of Technology & Management Studies (PLITMS), Buldhana, Issue in 05 may-2016

[6] Google images

[7] Ritika Bali, Harshita Tomar, Gunjesh Sahney, "Theoretical assessment of E-Ball: A diminutive PC obscuring the traditional PC", Department of Computer Science, Guru Tegh Bahadur Institute of Technology, GGSIPU, New Delhi