International Journal of Advance Research in Science and Engineering
Vol. No.6, Special Issue (01), September 2017, BVCNSCS 2017
www.ijarse.com
IJARSE
ISSN 2319 - 8354

ESIGHT EYEWEAR

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ABSTRACT:*Esight is an "electronic glasses" that let the legally blind actually see. This technology is not being used in India. A high speed, high resolution camera within the middle of the Esight electronic glasses captures what a user is viewing in real time. The only major drawback is, it is a wire connected device.*

I. INTRODUCTION

Esight is an eccentric wearable medical device that strengthens the functional vision of an individual person who has the constitutionally blind. Esight doesn't require any type of surgery. Esight allows individuals with vision loss to truly see. What they are doing with their fresh reconditioned sight is up to them. Other than in operation a automobile, this extends to just about all freelance Activities Daily Living (ADLs). It sports a sleek new type issue, is considerably lighter and smaller.

II. LITERATURE SURVEY

eSight's founder, a successful electrical engineer, has 2 sisters who are lawfully blind. In 2006, he aforesaid to himself, "If I will assemble groups of engineers UN agency will build unimaginable product for the business market, why not assemble associate degree engineering team which will build electronic glasses that will let my sisters see?"

The eSight engineers had a singular vision for a completely new and revolutionary sort of resolution they needed to make. For eSight to be actually helpful for the lawfully blind, the technology would have to:

- Be a cushty, wearable and hands-free device, permitting wrongfully blind people to use each of their hands whereas they use eSight to visualize.
- Be ready to replicate the manner sighted folks see by "instantaneously" auto-focusing between short-range vision (reading a book or text on a smartphone) to mid-range vision (seeing faces or observation TV) to long-range vision (looking down a corridor or outside a window), with none perceptible lag time.
- Be a complicated, comprehensive medical device that would replace all the numerous single-task helpful devices that area unit presently offered however don't offer actual sight (e.g. white canes, magnifying devices, service animals, Braille machines, CCTV scanners, text-to-speech code, etc.).
- Provide true quality so a wrongfully blind individual may use eSight, not simply to visualize whereas

  sitting down however be severally mobile (e.g. walking, exercising, travel to figure or college, taking a plane, enjoying golf, etc.).
- Enable wrongfully blind people to severally perform nearly all Activities of Daily Living (ADLs).

It took a few years of labor, investments of tens of numerous greenbacks, many proprietary innovations and far trial-and-error operating with several wrongfully blind people, but, the top result was eSight: electronic glasses that alter the wrongfully blind to really see. Today, eSight is proud to be the biggest, most knowledgeable and best-funded R&D work within the world dedicated to non-surgical sight restoration for the visually impaired. Our record of technological achievements and also the breadth of our patents within the space area unit second to none.

III. METHODOLOGY

Esight is currently subject of a major new clinical trial. The mission, that "Everyone Deserves to See". It is proud to announce that Esight is available for purchase in 33 more countries all over the world. Be a cushty, wearable and hands-free device, permitting de jure blind people to use each of their hands whereas they use eSight to ascertain. Be ready to replicate the method quick-sighted individuals see by "instantaneously" auto-focusing between short-range vision (reading a book or text on a smartphone) to mid-range vision (seeing faces or observance TV) to long-range vision (looking down a hall or outside a window), with none perceptible lag time. Be a complicated, comprehensive medical device that might replace all the numerous single-task helpful devices that square measure presently on the market however don't give actual sight (e.g. white canes, magnifying devices, service animals, Braille machines, CCTV scanners, text-to-speech software package, etc.).give true quality so a de jure blind individual might use eSight, not simply to examine whereas sitting down however be severally mobile (e.g. walking, exercising, traveling to figure or faculty, taking a plane, enjoying golf, etc.).

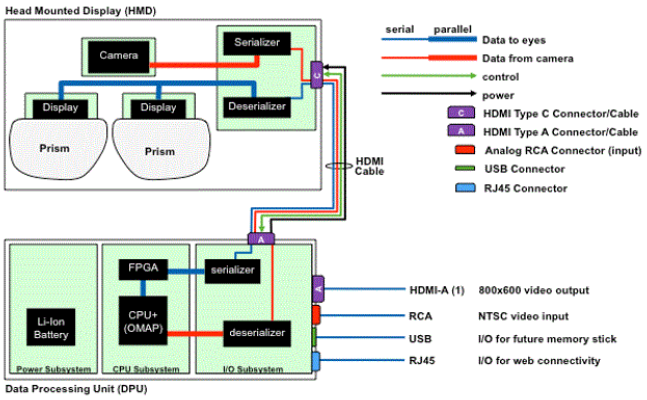
eSight, permits the lawfully blind or those living with low vision to visualize with 20/20 vision. The glasses capture the user's surroundings and remodel the footage into a type additional appetizing for the blind eye – primarily, filling in each user's blind spot.

IV. WORKING PROCESS

- A high-speed, high resolution camera within the middle of the eSight electronic glasses captures what a user is observing in real time.
- eSight's powerful computer instantly processes the high definition video and displays it on 2 OLED screens ahead of the user's eyes victimization leading edge optics.
- eSight's proprietary algorithms enhance the video feed.
- Full color video pictures are clearly seen by the eSight user with new visual clarity and no perceptible latency or delay.
- eSight users will simply management color, contrast, focus, brightness and magnification (24X) employing a sleek controller and intuitive interface.
- eSight users will take photos, and stream video and games utilizing eSight's Wi-Fi, Bluetooth and HDMI capabilities.

V. PROPOSED SYSTEM

We can use the Bluetooth or NFC technology to connect the glasses with the mobile devices. By using wireless technology, it is flexible to handle the device. We can adjust the clarity or zoom of the pictures with the help of mobile device. By connecting with the mobile we can able to get the notifications by mobile directly to the eyewear device. The Esight glasses can be paired with single mobile device by using the MAC address so that others cannot be able to connect.



VI. CONCLUSION

Here by, we conclude the above technology by introducing a new technique of wireless to Esight eyewear product which makes the user to use the product more conveniently and which also reduces the burden of carrying of the adjustable device where ever the user goes. By the above introduced technology the user can get the notifications directly on the eyewear device.

VII. REFERENCES

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