

Mini High Digital Kwality Lens

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Abstract: Mini high digital kwality lens (MHDK LENS) is absolutely vital for technology to gain predominant easy controlling functions of smart mobile and system. This paper carries out a lot of observational experiments on eye contact lens. It is used in controlling of your smart Mobile or system with your eye, you can watch movies by closing your eyes, to take photos and videos by blinking your eyes, it is also used in fashion field and medical field. MHDK LENS makes you feel everything reality, reality is could be possible by embedded nano transparent wireless display into a contact lens. Furthermore, simulations are conducted to optimize the MHDK LENS. This concept design of MHDK LENS will provide easiest way of operating your smart Mobile or system.

I. PURPOSE OF PROJECT

This project makes you to feel reality. This project can make you to watch movies, operate your smart phone or system by closing your eyes. This is higher than 3D. This is also used to take photos by Nano camera. This is also used to make youth fashionable. And finally in medical field used to protect your eyes from UV Ray's.

II. HOW IT IS POSSIBLE?

Reality generated in the form of a contact lens, with embedded Nano transparent wireless display, would have many advantages over a glasses-based design. Many companies are currently working on ways to build curved LCDs, or even flexible LCDs, reality is could be possible by embedded into a contact lens.

Parts used.

- ✓ Nano transparent wireless display.
- ✓ Nano power receiver.
- ✓ Nano data transmitter.
- ✓ Nano capacitor.
- ✓ Nano power circuit.
- ✓ Nano LEDs.

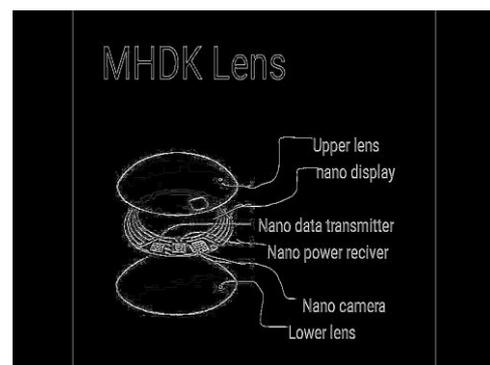


Figure 1

Other outer parts.

This parts are used to send power to lens and receive data from nano camera.

usb transmitter and
reciver

Data receiver. Power transmitter



Figure 2

As we see above figure there are MHDK (Mini high digital quality) LENS, USB transmitter and data receiver.

This is used to connect with system or any smart phone. It has power transmitter.



Figure 3

This power transmitter is used to send required power for the all parts in the lens from the system or smart phone.

Data receiver is used to collect the data from the data transmitter present in lens (Nano camera data)

III. HOW THESE MHDK LENS ARE MADE AND WORK

Graphene-based “ Nano platelet” material that was stable and conductive enough to act as a fuel cell cathode. These Nano platelets could be separated into individual sheets by a process called ball milling. On larger scales, ball milling is typically used to uniformly grind powders with a small agitated ball bouncing around inside a closed vessel. Inside a mini ball mill, graphene can be mixed with various halogens, like chlorine or bromine, which then creep in between the graphene sheets to make a robust material.

We can able to build miniature inorganic LEDs by connecting the graphene sheets together with silver nanowires into a hybrid structure. The flexible silver nanowires enabled the hybrid structure to maintain its high conductivity even when bent. The most important factor for using the hybrid graphene in a contact lens-based is its high transparency. Other transparent materials like indium tin oxide (ITO) become much less conductive when bent. When the hybrid LEDs were embedded into a regular soft contact and tested in a rabbit no ill effects were observed.

IV. OPERATING PHONE WITH MHDK LENS

On these days we all know we can operate our system on Android Wireless by installing some software apps.

We can also operate phone with MHDK lens. There are two methods for this. There are possible by the sensors.

- ✓ Movement of eye ball sensor.
- ✓ Eye focusing sensor.

V. BY MOVEMENT OF EYE BALL SENSOR

Here is example we all used basic phone before using of smart phone we see the highlight of that particular area of application the highlighted area moves top to bottom and side to side. In the same way we can controlled the phone or system by after connected to MHDK lens. It has some of the soft-wares that should be installed in smartphone or system.

After connected to Nano transparent Wireless display MHDK lens everything is going to visible on screen of lens.



Figure 4

As shown above picture the highlighted one is used to move side to side and top to bottom by the movement of eye ball the sensor is used in lens the movement of eye ball the application is Opened when you make the highlight to be on application for 3 to 4 seconds.

VI. BY EYE FOCUSING SENSOR

For example there are four files displayed in the transparent Nano wireless display When we focus for 2 to 3 seconds on the fourth file it gets access and opened. As shown below figure.

VII. WORKING OF NANO CAMERA

The eye sensor is used to focus camera. And it also used in the performance of the taking photos. The Nano camera gets activated when we open the camera application on the smart phone or system.



Figure 5

The camera works in background in smart phone and system.

When we need to take photo we have to give just one blink.

When we need to take continues photos just we have to give two blinks then it takes one photo continuously for one second this continues taking photo stops when we give third blink.

Video recording can be done by giving one blink after video option was activated in smartphone or system recording stops when we give second blink. The photo and video data is sent to system or smart phone by data receiver from the data transmitter present in lens.

VIII. USING OF MHDK LENS IN FASHION FIELD

On these days everyone is like to be fashion. There are many colorful eye lens make special look. But buying of all colorful eye lens are high cost and wasting of money and material.

By using transparent Nano wireless display we can create many colors of eye lens even which are not available.

By making of the application with many colors of eye lens. When we connect the wireless display with smart phone or system and open the application of eye lens when we select the particular color that color gets displayed in transparent Nano wireless display.



Figure 6

USE OF UPPER LENS

The upper lens are used to just protect the all parts inside the eye lens and it also used to protect eyes from the dust. This is also used to protect from UV rays.

USE OF LOWER LENS

The lower lens are just like separation and protection from the parts present in the eye lens. Lower lens are used to protect eye.

LIGHT-EMITTING DIODE (LED)

LEDs are the core technology behind the MHDK lens because they form images in front of the eye, whether they are in the form of words, charts, or photographs. Current LED chips measure 300 nanometers in diameter, while the “light emitting” zone on each chip is a 60 nanometers wide ring with a radius of 112 nanometers. Light-emitting diodes are one-third of a millimeter. While red LEDs were previously used for prototype development, currently blue LEDs are preferred to achieve a full color display. GAN and its alloys are also preferred due to their nontoxicity, high efficiency and emission wavelength. Micro-LED design with a peak intensity of approximately 475 nm is achieved, and it is adequate to illuminate the retina.

What was not available in Samsung contact lens. It has no fashion field, medical field and phone or system operation with lens.

REFERENCES

- [1] [https://www.digitaltrends.com/mobile/samsung-smart-contact-lens-news/Samsung contact lens.](https://www.digitaltrends.com/mobile/samsung-smart-contact-lens-news/Samsung%20contact%20lens)