Intraocular Pressure measuring device

Tech ID: 27204 / UC Case 2016-619-0

BRIEF DESCRIPTION

The present invention discloses a small device to measure Intraocular Pressure. This invention communicating the measurements of Intraocular pressure with outside devices.

FULL DESCRIPTION

Background:

Pressure in various organs of the body (e.g., brain, eye, heart) is highly regulated and its value can provide an indication of patient health or disease progression. In diseases where the ability to regulate these pressures is lost, impairment of function or death may result; even at the microscopic level, cell damage may be induced in the presence of abnormal pressure. Monitoring the absolute value of and variation of internal pressures allows diagnosis and tracking of the progress of medical intervention. Measuring Intraocular Pressure (IOP) directly in the human eye is very difficult, and the currently available IOP monitoring methods use external measurement techniques to infer the IOP of the eye.

Problem:

*Currently available Intraocular Pressure (IOP) monitoring methods use external measurement techniques to infer the IOP of the eye, this technique becomes cumbersome.

*Implantable devices have been conceived, such as micromachined sensors that have antennas connected to them. Others use a movable pressure indicator. However, none of the devices are particularly successful and are difficult to miniaturize.

SUGGESTED USES

The disclosed invention can be used for measuring the Intraocular Pressure of the eye and may be useful in diseases that are caused due to high Intraocular pressure such as Glaucoma and Ocular Hypertension

ADVANTAGES

The current invention allows for a small device to be implanted into the human eye, and allows for interrogation read out of the Intraocular Pressure.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20200253493	08/13/2020	2016-620

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OTHER INFORMATION

CATEGORIZED AS

- » **Medical**
  - » Devices
  - » Disease: Ophthalmology and Optometry
- » **Sensors & Instrumentation**
  - » Medical

RELATED CASES

2016-619-0, 2016-620-0, 2016-621-0

LIMITATIONS

§ Currently available Intraocular Pressure (IOP) monitoring methods use external measurement techniques to infer the IOP of the eye, this technique becomes cumbersome.

§ Implantable devices have been conceived, such as micromachined sensors that have antennas connected to them. Others use a movable pressure indicator. However, none of the devices are particularly successful and are difficult to miniaturize.

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