Office for Technology Commercialization

Scleral Depressor for Ophthalmic Surgery

Frequently, ophthalmic surgery of the retina is complicated by optical and physical barriers. The anatomy and optical properties of the eye may obscure or obstruct the surgeon's view, particularly of the peripheral retina. In addition, the zone behind the iris is obstructed from direct view.

Consequently, the surgeon sometimes finds it helpful to have an assistant manually apply pressure to the outside of the eye in order to bring the retina into the surgeon's visual field to facilitate manipulation. However, the availability of a skilled, experienced assistant may be limited and adequate lighting may compromise the surgery.

The University of Minnesota has developed a remotely controllable system and method of positioning and operating an automated scleral depressor. The automated scleral depression technology answers the need for a method and system to allow a surgeon to directly control application of pressure to the sclera and improve visualization of the peripheral retina.

Features & Benefits

• Allows surgeons to control the position and depth of lateral mobilization of the wall of the eye

• Increased surgeon control of depression pressure and improved visualization

• Consistent depression technique relieves dependence on skilled assistance, minimizes risk of complications, reduces surgical time and costs

Technology Status

Early prototype has been developed and is currently being tested for efficacy.

IP Status

US patent pending
US2004/0204727

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UM Docket Z02218

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