CORNEAL CONTACT SYSTEM

FIELD OF THE INVENTION

The present invention pertains generally to interface devices that selectively engage a suction ring with a patient interface of a laser unit for use in stabilizing an eye of a patient relative to the laser unit during ophthalmic surgery. More particularly, the present invention pertains to interface devices which provide for a symmetric closing of the device onto a patient interface of a laser unit. The present invention is particularly, but not exclusively, useful as an interface device which avoids, or at least minimizes, the application of uneven force loadings on the optics of a patient interface of a laser unit that might otherwise compromise the operational accuracy and precision of the laser unit after the interface device has been engaged with the patient interface of a laser unit.

BACKGROUND OF THE INVENTION

In an ophthalmic surgical procedure, wherein a laser unit is used to alter tissue of an eye, it is essential that the eye be properly stabilized in its alignment with the laser unit. In many instances, such stabilization may be best accomplished by placing the eye in direct contact with a patient interface of the laser unit. Typically, this requires a stabilizing device, such as a suction ring, that can be positioned directly against the eye (e.g. against the cornea). An interface device is then engaged with the stabilizing device and is used to fixedly hold the stabilizing device (e.g. the suction ring)