

## Product

Preformed Suture Hitch injector

## Indication

Ophthalmic surgery

## Value Propositions

- ▶ Significantly decreases operation time
- ▶ Improves long-term IOL stability

## Market

- ▶ \$8.79 billion in 2018—Global ophthalmic surgical devices market (4.8% CAGR 2019-2026)

## Intellectual Property

- ▶ US issued\*
- ▶ Available for licensing

## Key Documents

- ▶ Injectable suture device for intraocular lens fixation. Smith et al., 2015. J Cataract Refract Surg.

## Contact

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Ref# CU3336H

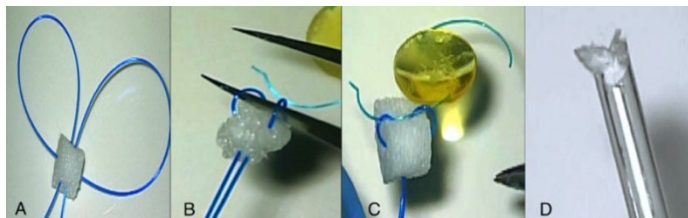
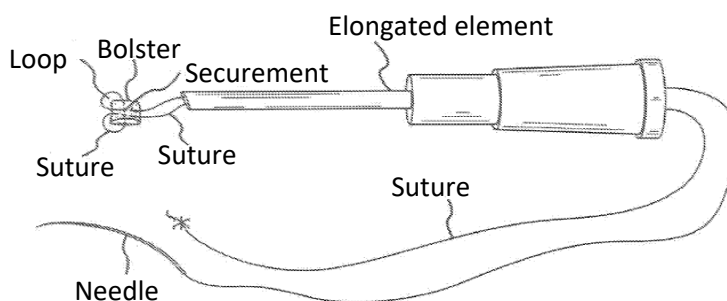
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## Background on CU3336H

For even incredibly skilled surgeons, suturing inside an eye is technically challenging due to space constraints. A skilled surgeon can take twenty times longer to suture inside the eye compared to conventional suturing. Millions of eye surgeries are done each year that require the securement of an intraocular object. The most common surgery is cataract surgery which is performed on about 4 million people in the US yearly. Other surgeries include insertion of a glaucoma drainage device, corneal transplants, scleral patch grafts, repair of iris defects, and many more.

## Technical Innovation

Dr. Jeffrey Olson has developed an injectable device for use during intraocular surgery, which injects a preformed suture hitch which can be used to secure intraocular objects such as securing intraocular lens, glaucoma drainage devices, and presbyopia reversal optical systems. The procedure involves piercing the external sclera with the elongated element and inserting it so that the distal end is located in the anterior chamber of the eye. Then, an injectable securement device is deployed from the distal end into the anterior chamber. The loop of the hitch is manipulated around an intraocular object. The proximal end of the suture is pulled to cinch the loop against the bolster before the elongated element is removed. Finally, the suture is secured to the external sclera. This has been successfully used in a patient with a dislocated intraocular lens. The inventor believes this is a safe and efficient improvement to intraocular surgery as it improves long-term intraocular lens stability and does not require suture passes behind the iris nor extensive anterior vitrectomy and conjunctival peritomy.



**Figure:** The device contains a preformed loop through a silicone bolster (A). As the suture is tightened, the loop constricts (B) and can be used to capture the IOL haptic (C). The bolsters can be withdrawn into and injected from the tip of the cannula (D).

\*US2015/0025540A1—"Injectable securement device and related delivery system and method of use."