

OptiMedica Granted Fundamental Patent on Laser Cataract Surgery by U.S. Patent & Trademark Office

The Associated Press

SUNNYVALE, Calif.--(BUSINESS WIRE)--Feb 25, 2013--OptiMedica Corp. has announced that the U.S. Patent & Trademark Office (USPTO) has granted the company a patent relating to the fundamental technology underlying laser cataract surgery. The OptiMedica patent, which will issue on March 12, 2013 as U.S. patent no. 8394084, contains broad claims and describes a 3D image-based femtosecond laser system for performing anterior capsulotomy and lens fragmentation during the cataract procedure.

“We are gratified to see the USPTO recognize the novelty of our invention and its practical realization in OptiMedica’s Catalys ® Precision Laser System,” said Dr. Mark Blumenkranz, Professor and Chairman of the Department of Ophthalmology at Stanford University, OptiMedica board member, recognized authority in ophthalmology and one of the inventors of the technology. “Laser cataract surgery is an exciting new breakthrough in ophthalmology, and it has been an honor to be at the forefront of its advance.” Co-invented by Dr. Daniel Palanker of the Departments of Physics and Ophthalmology at Stanford University, OptiMedica’s Catalys has been shown in numerous clinical studies to perform the laser cataract procedure with precision and accuracy that is unparalleled in the industry. 1-3 In addition, laser lens fragmentation with Catalys has been shown to dramatically reduce or eliminate the need for ultrasound energy to break up and remove the cataract. 4,5 “The patent issuance is a terrific milestone affirming OptiMedica’s pioneering position in the new global market for laser cataract surgery,” said Mark J. Forchette, president and chief executive officer of OptiMedica. “This is truly breakthrough technology, and it is very satisfying to see the foresight and innovative leadership of its inventors recognized by the USPTO.” The U.S. patent supporting Catalys is one in a series that OptiMedica has filed for the system and its underlying technology worldwide. These include five issued international patents as well as more than 30 pending patents in the U.S. and more than 25 pending international patents.

Since its international launch in November 2011 and U.S. launch in February 2012, Catalys has been named one of the top medical technology products in the world. The system has won the prestigious R&D 100 award from R&D Magazine and was also a finalist in the 2012 Medical Design Excellence Awards.

About Catalys Catalys is a precision laser cataract surgery platform that delivers gentle, highly customized procedures with best-in-class accuracy and performance. 1-3 Catalys combines a femtosecond laser, integrated 3D Optical Coherence Tomography (OCT) imaging, OptiMedica’s breakthrough pattern scanning technology and a number of other unique features that distinguish it in the field.

These include a Liquid Optics™ Interface that ensures stable system-patient attachment and optimizes the optical path to the patient's eye; a proprietary Integral Guidance™ mapping system that ensures the femtosecond laser pulses are delivered safely and precisely to the intended location; and, an elegant, easy-to-use graphical user interface that simplifies the treatment planning process and minimizes the time the patient is under the laser. Surgeons have reported exceptional results with Catalys, including complete capsulotomies in 99 to 100 percent of procedures, elimination of ultrasound energy during lens disassembly and removal, and exceptionally precise corneal incisions. 1-6 About OptiMedica Founded in 2004 and headquartered in Sunnyvale, Calif., OptiMedica Corp. is Silicon Valley-based global ophthalmic device company dedicated to developing performance-driven technologies that improve patient outcomes. Exclusively focused in the cataract therapeutic area, the company has developed the Catalys Precision Laser System to transform existing standards of care in cataract surgery.

OptiMedica's legacy of innovation in ophthalmology also includes the development and commercialization of the PASCAL® Method of retinal photocoagulation, which was acquired by Topcon Corp. in August 2010. The company is funded by Kleiner Perkins Caufield & Byers, Alloy Ventures, DAG Ventures, BlackRock Private Equity Partners and Bio*One Capital. For more information, please visit www.optimedica.com.

References

- 1 Palanker DV, et al. "Femtosecond laser-assisted cataract surgery with integrated optical coherence tomography." *Sci Transl Med*. 2010 Nov 17;2(58):58ra85.
- 2 Friedman NJ, et al. "Femtosecond laser capsulotomy." *J Cataract Refract Surg*. 2011 Jul;37(7):1189-98.
- 3 Culbertson, B. "Optimization of corneal incision parameters with a femtosecond laser for cataract surgery." XXX Congress of the ESCRS, Sept. 2012.
- 4 Conrad-Hengerer I, Hengerer FH, Schultz T, Dick HB. "Effect of femtosecond laser fragmentation on effective phacoemulsification time in cataract surgery." *J Refract Surg*. 2012 Dec;28(12):879-83.
- 5 Conrad-Hengerer I, Hengerer FH, Schultz T, Dick HB. "Effect of femtosecond laser fragmentation of the nucleus with different softening grid sizes on effective phaco time in cataract surgery." *J Cataract Refract Surg*. 2012 Nov; 38(11): 1888-94.
- 6 Abell RG, Kerr NM, Vote BJ. "Catalys femtosecond laser-assisted cataract surgery compared to conventional cataract surgery." *Clin Experiment Ophthalmol*. 2012 in press.

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