



Pantec Biosolutions Selects Oclaro Laser Diode Bars for Transdermal Drug Delivery and Tissue Ablation Systems

Oclaro High-Performance Laser Diode Bars Deliver the Performance and Reliability Needed for Pantec's Revolutionary P.L.E.A.S.E.® Laser Platform

SAN JOSE, Calif., May 18, 2011 /PRNewswire/ -- Oclaro, Inc. (NASDAQ: OCLR), a tier-one provider of optical communications and laser solutions, today announced that its 9xx nm high-power laser diode bars have been selected by Pantec Biosolutions, the leading provider of epidermal medical applications, for use in its next generation P.L.E.A.S.E.® (Precise Laser Epidermal System) platform. This cutting-edge new laser platform represents a new era in biomedical applications by enabling an easy, painless and needle-free delivery method for drugs, as well as safe tissue ablation for skin rejuvenation.

According to Pantec, the global aesthetic market, which includes tissue ablation, is expected to grow from a \$4.4 billion market in 2010 to a \$7.5 billion market in 2015; while the market for transdermal drug delivery is growing rapidly and is expected to be a multi-billion dollar market by 2015. Designed for medical professionals and consumers, these new devices offer a pain-free delivery method for a variety of medical applications, such as in-vitro fertilization, vaccinations and wrinkle removal. Oclaro worked closely with Pantec to deliver a customized quasi continuous wave (QCW) sub-assembly laser diode solution that delivered the performance and reliability needed, at a price point that will enable widespread adoption in the consumer space. Pantec's first Oclaro-based product, which is called the P.L.E.A.S.E.® Professional, is a tabletop system that will be used for both transdermal delivery and tissue ablation. This device will initially be sold in Europe with plans to bring the product into selected markets worldwide, starting in 2011.

"This win with Pantec is yet another example of how lasers have reached the price/performance targets that enable them to be widely used in the high-volume consumer space," said Gunnar Stolze, Worldwide Sales Director of Industrial and Consumer Lasers at Oclaro. "The combination of Pantec's P.L.E.A.S.E. platform technology with Oclaro's highly-efficient, high-volume manufacturing capabilities can deliver innovation to the consumer that revolutionizes modern day medical and cosmetic procedures such as drug delivery and tissue ablation."

"We partnered with Oclaro because it delivered the technology and reliable manufacturing excellence we needed, and also worked closely with us to design the best solution for our next generation P.L.E.A.S.E.® products," said Thomas Bragagna, CTO at Pantec Biosolutions. "As this market continues to expand, we are confident that only a world-class supplier such as Oclaro will enable us to establish a clear leadership position in a space that is poised for explosive growth in the future."

About Oclaro Laser Diode Bars

Oclaro developed a conductively cooled 9xx nm laser diode bar primarily designed for QCW pumping of miniaturized solid state lasers, which is what Pantec required for its P.L.E.A.S.E platform. Oclaro's QCW operation enabled Pantec to develop a compact laser device due to its low cooling requirements, small footprint and extremely high pulse power.

Oclaro laser diode bars feature a highly efficient two sided cooling setup of the 10x12x5mm(3) small footprint diode assembly, which allows for output peak power levels as high as 320W at 300A drive current, 5ms pulse duration and 10% duty cycle. The Er:YAG laser systems developed by Pantec are pumped between 0.1 and 10ms pulse duration and 1-20% duty cycle, making them attractive for medical applications such as transdermal delivery of drugs from large peptides up to whole antibodies, since molecules of this mass can't penetrate passively into the dermis.

To deliver the highest level of reliability, the Oclaro high power laser diodes feature the Oclaro E2 mirror passivation process, which protects the front facet of the bar against Catastrophic Optical Damage. In addition, the Telecom grade AuSn (gold tin) hard solder makes the product suitable for demanding industrial and defense applications in CW and hard-pulse operation mode.

About the P.L.E.A.S.E. ® Platform

P.L.E.A.S.E.® is a novel transdermal delivery method for high molecular weight drugs. It creates controlled aqueous micropores through the stratum corneum into the epidermis. Due to the special features of the device the micropores do not reach the dermis, where nerves and blood vessels reside. The first device using this new platform is the P.L.E.A.S.E.® Professional, a stationary medical laser device targeted mainly for the dermatologic and aesthetic markets. An intelligent graphical user interface, together with the CE mark and the integrated class 1 laser, guarantees simple and safe use by the medical personnel or the patient, who can use the device without supervision. At a later time, this device will then be complemented by the P.L.E.A.S.E.® Private, a battery-powered handheld medical laser device targeted mainly for drug delivery.

About Oclaro

Oclaro, Inc. (NASDAQ: OCLR) is a tier-one provider of optical communications and laser components, modules and subsystems for a broad range of diverse markets, including telecommunications, industrial, scientific, consumer electronics, and medical. Oclaro is a global leader, dedicated to photonics innovation with cutting-edge research and development (R&D) and chip fabrication facilities in the U.K., Switzerland and Italy, and in-house and contract manufacturing sites in the U.S., Thailand and China. To support its diverse and global customer base, Oclaro maintains design, sales and service organizations in each of the major regions around the world. For more information visit <http://www.oclaro.com>.

About Pantec Biosolutions

Pantec Biosolutions AG is a private medical technology company specialized in using laser microporation to deliver large molecular weight drugs into the epidermis for local or systemic uptake as well as various applications in dermatology. Its proprietary P.L.E.A.S.E.® (Precise Laser Epidermal System) platform enables efficient, needle-free and painless administration of biopharmaceutical drugs, in varying and individualized dosages, through partnered patch technology. The technology is currently in clinical trials (phase II) for the delivery of IVF hormone therapy, a market with an estimated value of US\$1.5 – 2 billion. Pantec Biosolutions' P.L.E.A.S.E.® platform is available both for the development of the Company's own pipeline and for penetration into new markets through strategic partnerships. Pantec Biosolutions is based in Ruggell, Liechtenstein.

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