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Licensing Opportunities

- Exclusive
- Non-exclusive
- Research
Sponsorship
- Product
Development
Partnerships
(PDP)

Lehigh Case # 101606-01

Ultra-Broadband Semiconductor Laser

Overview

The manufacturing of broadband semiconductor lasers has broad applications in optical communications and high sensitive bio imaging based on the emerging technology in optical coherence tomography. This new class of high power broadband laser devices will enable low cost and widely tunable laser source for optical communications. In the case of bio-imaging applications, this new device will enable a 3-D imaging system that is small, high speed, lightweight, low cost, and high resolution. In addition, a broadband laser source will also unfold many news products in communications and medical applications such as ultra-short pulse mode-lock laser for high capacity optical data transmission, *in vivo* biopsy and endoscopy of internal body cavities.

Applications and Advantages

- New class of device enables 3-D imaging system for
 - In vivo biopsy
 - Internal body cavity endoscopy
 - High capacity optical data transmission
- Low Cost
- Lightweight
- High resolution

Status and Intellectual Property

A U.S. utility patent application has been filed.

Lehigh ExpertNet

- **Boon-siew Ooi** -
<http://expert1.cc.lehigh.edu/LehighExperts/ExpertDetail.aspx?ExpertID=70402812>