

#### **TECHNOLOGY**

# Optical Signal Processing Based on Light Controlled Photon Tunneling

#### **OVERVIEW**

Innovations in the field of optical technology will continue to offer system designers the opportunity to create new solutions that will further stimulate the evolution of the all-optical telecommunication networks. In the same way that transistors and integrated circuits transformed the twentieth century into the "electronic century", all-optical components will make the first century of the millennium "the photonic century."

Researchers at the University of Maryland have developed and proved the possibility of controlling light transmission at a single photon level. Their elegant approach, based on a new concept of light-controlled photon tunneling, opens the possibility of processing information via light at a very basic level, "controlling light by light."

This research can be used in a variety of applications for next step applications in "all-optical" technology including quantum computing, all-optical signal processing and control.

See US patent No. 6,897,436 Optical Signal Processing Based on Light Controlled Photon Tunneling

For additional information, please contact the Office of Technology Commercialization, University of Maryland, College Park, MD 20742. tel: (301) 405-3947, e-mail: <a href="mailto:otc@umd.edu">otc@umd.edu</a>

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### **Additional Information**

### INSTITUTION

University of Maryland, College Park

### **PATENT STATUS**

US Patent 6,897,436

## **LICENSE STATUS**

Contact OTC for licensing information

# **CATEGORIES**

• Microelectronics

# **EXTERNAL RESOURCES**

• US Patent 6,897,436

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