



Wearable Free Space Optical System for Identification and Communication

Track Code: CRANE-200118

Categories:

- Electrical Engineering
- NSWC Crane

Keywords:

- Communications
- Crane
- Electrical Engineering
- Optical Communication
- Optics
- Wearable Electronics

The U.S. Navy seeks a partner for licensing and collaboration on an optical system and method of using optical data transfer for identifying people and communicating using lightweight, wearable free space optical systems.

There are areas where it is undesirable to use RF or other available spectrum frequencies for communication, such as where another party can detect and examine data transfers, or where existing technology is subject to too many devices operating in the same area.

Naval Surface Warfare Center, Crane Division (NSWC Crane) has developed a system for identifying entities and communicating using lightweight, wearable free space optical systems. A variety of optical and electronic elements are used to enable communications and identification in an environment where identification and communication through normal RF bands may be limited. The system works by converting data into optical signals, which are then transmitted using a laser and received by an optical receiver. The optical signals can be translated back into data including visual, audio, and text data.

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Intellectual Property:**Application Date:** (None)**Type:** Utility Patent**Country of Filing:** United States**Patent Number:** 9,602,203**Issue Date:** March 21, 2017**Contact OTC:**

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