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For Immediate Release

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Patent Portfolio Growing at Cal Poly

SAN LUIS OBISPO – Cal Poly's Research and Graduate Programs Office reported this week that two of its pending patent applications have received formal notice of approval from the United States Patent and Trademark Office.

The first patent, "Field Water Purification System," is a lightweight water-treatment system for field environment water purification. It was designed particularly for use in the wake of major disasters, when access to clean drinking water is critical.

Trygve J. Lundquist, assistant professor of civil and environmental and engineering invented the technology. The purification system improves three vital steps in the provision of potable water in disaster relief – the transport, treatment and safe storage of the water.

The low-cost, compact design is superior to treatment systems currently used, such as 5-gallon containers air-dropped to sites, iodine tablets, hand-pumped filters, and various high-tech, high-cost devices. The design integrates techniques used at water-treatment plants into a personal water bag that enables collection, treatment, transport and storage in a single unit and treats enough water to supply a family of five for up to 10 days.

Potential users of the product may include the U.S. government agencies such as FEMA and the National Guard and international relief organizations such as the Red Cross/Crescent, UNICEF, USAID, and CARE – all of which serve tens of millions of disaster survivors each year.

In fall 2008 Cal Poly graduate student Tricia Compas was awarded $14,500 from the Clinton Global Initiative and the Wal-Mart Foundation for her work testing the effectiveness of the purification system

The second patent, a "Procedure for RFID Tagging of Reusable Plastic Containers (RPCs)," identifies and tracks reusable plastic containers and their contents. By employing radio frequency identification (RFID) the tags can be read in a variety of environments when barcodes and other optical technologies are not options. They can also be equipped with sensors that significantly improve tracking food shipments.

The technology was invented for the agricultural industry by Tali Freed, director of the Cal Poly multidisciplinary center Poly-GAIT - for Global Automatic Identification Technologies.
By tracking food routes – from the grower/processor, to the distribution center, and to the retail store – RFID technology can provide a traceable audit trail for contaminated foods, thus leading to new standards in food safety and quality.

Once issued, these patents will add to the university's current portfolio of 11 patents and nine patents pending. Licensing opportunities are available through the offices of the California Central Coast Research Partnership (C3RP) at www.c3rp.org for patents held in the university's portfolio.

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