Technology Commercialization Opportunity
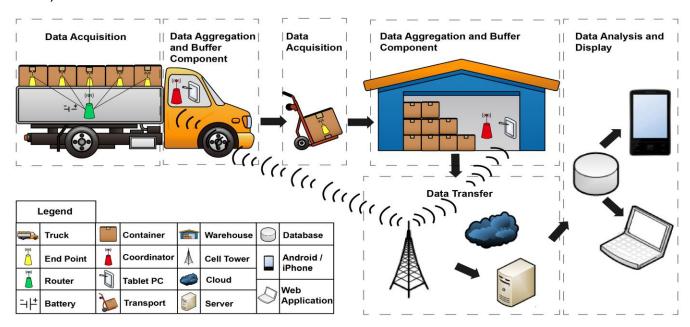
Pak-Track™ – A Package Tracking, Monitoring and Reporting System

Inventor(s): Changfeng Ge et al.

Technology Description

The Real-Time Package Tracking and Monitoring System, or **Pak-Track I**, was designed to wirelessly record and report information about individual packages during transit, and for the user to immediately view the data. Data is routed through the use of three types of devices; an endpoint, a router, and a coordinator.

The endpoint device is equipped with multiple sensors allowing it record temperature, humidity, shock, and vibration. The wireless router transmits data from the endpoint devices to the coordinator in the event an endpoint device is too far away, or can otherwise not communicate directly with the coordinator. The coordinator collects the transmissions from all of the other devices, and sends the accumulated data to a tablet to be stored or uploaded to the server. **Pak-Track II**, is a standalone product that has all of the features of the Pak-Track I, but does not communicate wirelessly. Instead, it can be preconfigured, inserted into a package, where it records the desired data, and upon delivery, its data can be uploaded to the server for processing. Using a secure website or Android tablet, the user can view all of the data recorded by both devices. The system provides logs of all of the data, various graphs, and analysis tools to further study the effects transportation had on the package.

Keywords: Real-Time, tracking, monitoring, temperature, humidity, shock, vibration, packaging

Intellectual Property Management Office

Rochester Institute of Technology – Intellectual Property Management Office
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Technology Readiness

The Pak-Track I and II have been deployed and tested by potential end users/customers.

Idea	Concept	Prototype	Alpha Version	Beta Version	Released

The developers of Pak-Track will work with licensees to finalize the development and move Pak-Track towards a "released version."

Intellectual Property

Pak-Track IP includes software, electronic designs, bills of materials, vendor lists and real life test data.
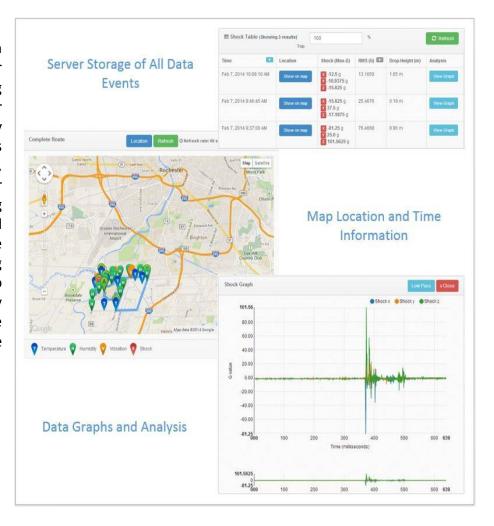
Applications

The packaging and distribution of goods is a multi-billion dollar business worldwide. During transport, a significant number of goods are damaged by distribution hazards such as temperature, humidity, shock, and vibration. A better understanding of the shipping environment is an essential part of evaluating the packaging and shipping process. Pak-Track aims to improve these evaluations by capturing and reporting on the shipping environment of the item(s).

Website www.pak-track.com

Target Customers/Uses

Pharmaceuticals, Medical, Organ Transport, Expensive Art, Cold Chain Transport, QA Engineers, Electronics

Opportunity

RIT's Intellectual Property Management Office (IPMO) is interested in working with those parties who are qualified and interested in the commercialization of this package tracking and monitoring system. Arrangement types include licensing the application to existing organizations or new organizations that have expertise in the field or related fields.

Contact

Those interested in learning more about this opportunity should contact: **Mr. William E. Bond**, Director of Intellectual Property Management at RIT (585) 475-2986, bill.bond@rit.edu Please Refer to ID 2014-002

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