



Patent Insights: INDUSTRIAL INTERNET OF THINGS

General Electric, Boeing, Qualcomm, Software AG USA, Falconry

LIQUIDAX
FUNDS

Liquidax™ Global Innovation Funds

FIRM DESCRIPTION

As an Alternative Asset Management firm sponsoring & managing private equity innovation funds; our focus is on investing assets into partner companies enabling accelerated market growth, competitive protection & increased value.

FUND DESCRIPTION

Liquidax Global Exchange Fund I, LP is a fund specifically developed for the purpose of investing-in and acquiring advanced (IoT) Technology, Innovation & Patents for the benefit of portfolio companies.

Portfolio companies enjoy the benefits of high-quality innovation and highly-correlated patents eliminating the needs for lengthy, high-cost R&D, risky M&A all while allowing immediate benefits & applications without the traditional costs or fees.

INNOVATION, IP ASSET & MARKET RESEARCH

In the execution of its strategy; Liquidax performs research on companies, markets, innovations, patents, claims, & investments. When we find interesting information we share with interested parties.

Accelerating Growth.
Increasing Value.

Global Innovation Funds™

Research & Analysis:



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As outlined in the recent MarketsAndMarkets IIoT market report; The Industrial Internet of Things (IIoT) market was valued at USD 93.99 Billion in 2014, to reach USD 151.01 Billion by 2020 and is expected to grow at a CAGR of 8.03% between 2015 and 2020. IIoT is the integration of complex physical machinery with industrial networks and data analytics solutions to improve operational efficiency and reduce costs. It comprises advanced sensor technologies, machine-to machine communication, real-time data analytics, and machine learning algorithms to enhance the decision-making capabilities of the industries.

SENSING & MONITORING MECHANICAL EQUIPMENT IN INDUSTRIAL MARKETS -- GENERAL ELECTRIC (GE)

US20150040051 (**General Electric**) illustrates an industrial monitoring system that provides monitoring capabilities for many types of industrial machines & systems. For example, an industrial monitoring system can monitor operational parameters of a gas turbine system using a number of sensors. This patent asset is important for connectivity and monitoring of “mechanical” devices within industrial automation applications. Industrial sectors such as factory, oil and gas, energy, transportation and others cannot easily shut down to deploy new digital equipment so having sensors that can network & monitor existing mechanical devices is critical.

ON-PEAK & OFF-PEAK OPERATION & ENERGY MANAGEMENT OF APPLIANCES -- GENERAL ELECTRIC (GE)

US20140163763 (**General Electric**) illustrates an energy management system exploiting predictive analytics. Utility companies are experiencing a shortage of electrical generating capacity due to increasing customer demands for electricity. The energy management system predicts on-peak hours and/or off-peak hours based on data obtained and stored from various monitoring devices using the predictive analytics system. The system is autonomous and works in a wired or wireless network with the intent of saving money for customers, helping manage energy for everyone, and helping the environment.

DETECTING ANOMALIES IN DATA RECEIVED FROM MANY SENSORS -- SOFTWARE AG USA, INC,

US 20160342903 (**Software AG USA, INC**) illustrates the use & application of techniques for machine learning that detects anomalies in data dynamically received from sensors associated with machines. The recent availability of very inexpensive sensors has resulted in an explosion of real-time, operational machine data. The analysis of data from such sensor sources can be important in a variety of contexts.

USING AN INTERNET OF THINGS (IIoT) NETWORK FOR MANAGING FACTORY PRODUCTION -- BOEING

US20160202692 (**Boeing**) illustrates the system for efficiently and accurately managing a multi-part production line in a smart factory environment. A technician on the factory line is equipped with a wearable device that enables the technician to view drawings and instructions pertaining to the technician's task. The factory is equipped with sensors for detecting technician's location and surrounding environment within a particular zone of the production line. When the technician enters an assigned zone of the production line, the sensors are activated and establish communication with the backend computing system to validate and authenticate technician's presence within the zone.

IIoT AUGMENTED REALITY (AR) FOR SMART FACTORY -- QUALCOMM

US20150347850 (**Qualcomm**) illustrates the IIoT Augmented Reality (AR) system for a smart factory. A machine broadcasts a status of the machine and tracking data related to the machine to a user AR device. The status includes a presence, an operating status, operating features, and characteristics of the machine. The tracking data includes a physical identifier and location information of the machine. When the user AR device is in proximity to the machine, the user AR device authenticated with the machine. Then, the AR application in the user AR device generates directions to the machine and descriptions of the machine. The AR application can augment the camera view with interactive virtual functions associated with functions of the machine.

CONDITION MONITORING AND PREDICTION FOR SMART LOGISTICS – FALKONRY

US20160196527 (**FALKONRY**) illustrates the supply chain logistics transportation system for predictive estimation of QoS across supply chains using condition monitoring and predictive analytics. The system includes sensors that monitor conditions associated with cargo units and the transportation environment. Sensors include door latch sensors, tire pressure sensors, oxygen-level sensors, stress sensors, chemical sensors, reefer sensors for refrigerated trailers, temperatures sensors. Sensors are distributed across several locations within transportation system or embedded within a product itself. Sensors generate sensor data based on monitored conditions and transmit the sensor data to quality management system via wireless network. The quality management system processes the collected data to predict QoS parameter values and recommend pertinent actions.

IMPORTANT IP ASSET DISCLOSURE:

Liquidax is sharing this information because it is interesting to us and we want to share with those interested in IIoT, technologies and patents. We DO NOT own any of the IP referenced in this brief. We are not suggesting any value for the IP referenced in this brief; and we are not endorsing or making any opinion to the success or failure of any IP referenced in this brief.

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