TANLA IS GRANTED PATENT FOR AUTOMATED METER READING SYSTEM AND METHOD THEREOF

Tanla Solutions Limited applied for a Patent on "Automatic Meter Reading System and method thereof", following which we have been granted the patent rights in Singapore vide Patent No. 147778 [WO2007/132573].

Tanla Automated Meter Reading System has been developed for efficient, accurate and cost effective sensor/meter readings. It uses an extremely low cost ad-hoc wireless mesh network technologies and methods for remotely reading and transmitting data from plurality of sensors/meters to host servers, without human intervention. This technology allows automatic discovery of network, optimum routes, fault tolerant failsafe routing mechanism, and encryption & compression techniques for transmission of data in a fast, secure and reliable manner.

TELEMETRY INDUSTRY

Many network providers increased their commitment to machine to machine (M2M) in 2009, so a good range of both national and multinational M2M service options will be available in mature markets during 2010 and 2011. Although the M2M market is very fragmented, it's growing at over 30 percent per year. Gartner Chip analyst recently estimated that more than 150 million smart meters would be installed worldwide in the next 5 years. Gartner expects those 5 years to bring as much as $2 billion in business opportunities for semiconductor and chipmakers.

The industry is beginning to recognize the potential of the market. To give an example, there is a mandated program being planned in Victoria with a planned deployment of 2.6 million meters over a 4-year period. The anticipated peak installation rate of AMI Meters is 5,000 per day across Victoria, Pennsylvania, 2.2 million meters deployed, Missouri, 1.7 million meters deployed.

LEGACY AMR TECHNOLOGIES

AMR technologies include handheld, mobile and network technologies based on telephony platforms (wired and wireless), radio frequency (RF), or power line transmission. The older AMR systems use outdated technologies like wired telephone lines, power line communications and the existing systems use a GSM/CDMA modem attached to the meter and send the data to the central server using SMS or GPRS data connection. These systems have several problems in terms of ensuring physical communication line connectivity or wireless coverage. The solution becomes dependent on the network laid out by a Telecom Operator and cannot overcome difficult terrains, RF shadows, weak coverage. In addition, they also have high hardware and operating costs due to wireless data or SMS. The current system become unviable when large deployments have to be planned.

TANLA PATENTED TECHNOLOGY

The innovative solution from Tanla employs an ad-hoc wireless mesh network of communication nodes capable of collecting meter data (or any sensor data, for that matter) from utility meters and

transmitting the data to a central station by hopping the data across other communication nodes for efficient and accurate billing, accounting and management purposes. Each communication node acts as meter reader as well as a router for the neighboring meter readers. Thus the system forms a mesh network of meter (or sensor) readers that provides for automatic discovery of network, optimum routes, fault tolerant failsafe routing mechanism, encryption and compression techniques for transmission of usage data in a fast, secure and reliable manner.

The Tanla AMR invention utilizes an extremely low cost RF hardware and highly efficient wireless communication that reduces operational costs to a fraction. The use of low range RF hardware also reduces the hardware cost significantly. The ad-hoc wireless mesh framework provides an easy mechanism for 3rd party system integrators to integrate with many kinds of meters including water, gas, electricity or any other sensor network like Defense perimeter, environmental monitoring, stress monitoring. Since the communication nodes form a network of their own, a significant benefit of the system is that the solution and deployment is Telecom Network Independent.

The wireless ad-hoc technology developed by Tanla helps system integrator to deploy extremely low cost communication mesh networks that provide a wide coverage of different land terrains, avoiding many of the shortcomings of alternate technologies. Low-cost M2M modules combined with Tanla Ad-hoc wireless mesh will enable a wide range of new-networked devices and business models. Key applications include smart grid, meter reading, security/surveillance, automotive systems, vending and point of sale, remote monitoring, and track and trace.

Tanla has also applied for a patent grant in Europe, USA, Malaysia and India, where the grant is pending.

About Tanla

Tanla is a leading innovator of Next-generation mobile commerce, mobile application solutions and interactive services. We provide end-to-end solutions to Mobile Operators, Handset Manufacturers, and Independent Software Vendors including

- Application Rights Management (License Manager)
- Mobile Payments
- Global messaging services
- Telecom Products and solutions
- 3G VAS Products

Tanla License Manager is embedded in over 170 million Nokia handsets. We offer Mobile Payments connectivity in over 160 countries globally.