IoT Smart Home Patents Data 4Q 2016

IoT Smart Home Patents Data 4Q 2016 is a custom research of TechIPm, LLC (<u>www.techipm.com</u>) based on the analysis of the published patent applications and issued patents in the USPTO regarding the IoT (Internet of Things) smart home.

Methodology

- 1. Search for the IoT smart home related patents.
 - Search the USPTO database for the IoT smart home related published patent applications and issued patent as of 4Q 2016
- 2. Review the searched patents for the key IoT smart home patents.
 - Categorize the identified patents by the key smart home application systems
 Energy/Utility Management System, Home Automation System, Home Security
 System, Lighting System, Safety Monitoring System
 - Categorize the identified patents by the key smart home technology innovation Control Automation, Energy Management Automation, Hazard Detecting, Home Care, Intelligent Lighting, Security Automation, Utility Management Automation
 - Categorize the identified patents by the key connected health value chain player Consumer Electronics Manufacture, ICT Solution, Automation, Internet/Computer, Telecom Operator, Telecom OEM Home Appliances, Media Production, Energy Management, Patent Monitization Entity, Security System, R&D (including university, individual inventor), Healthcare Solution, Medical Device Manufacturer, Auto Parts Manufacturer
 - Categorize the identified patents by key smart home technology innovation status
 Incremental innovations of the current market products/services
 Innovations of the potential new market products/services:
 AI (Machine Learning), Audio Analytics, Augmented Reality, Autonomous IoT,
 Cloud/Big Data, Home-Car Convergence, Emotion-Aware IoT, Home Care, Robots,
 Self-Aware IoT, UX, Video Analytics

Deliverables

<u>MS excel file</u> for current assignee, patent number (hyperlinked to Google Patent), title, application systems category, value chain player category, technology innovation category, technology innovation status category.

Examples for Data Use Cases

Innovation Status

Patent information can provide insights regarding the state of the art of smart home innovations.

Innovation Opportunity

Using patent information, one can identify the potential innovation R&D areas ("white space") that can lead to new smart home products/services development through the patent analysis.

Cross-competitor Analysis

Patent information can provide insights regarding the competitive advantage innovation strategy in alignment with the strategic move of a specific company for smart home business leadership through the cross-competitor analysis.

Value Chain

Patent information can provide insights regarding the state of the art of smart home innovations of the value chain players.

Patent Dispute Risk

Patent information can provide insights regarding the potential patent dispute risks of smart home applications.

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