

# Domatic Pioneering Innovation: A Glimpse into Our Patent Portfolio

03.17.25

**San Mateo, California** - Innovation is at the heart of everything we do. Our commitment to pushing boundaries is reflected in our robust patent portfolio, which showcases our dedication to developing cutting-edge technologies that shape the future of smart buildings.

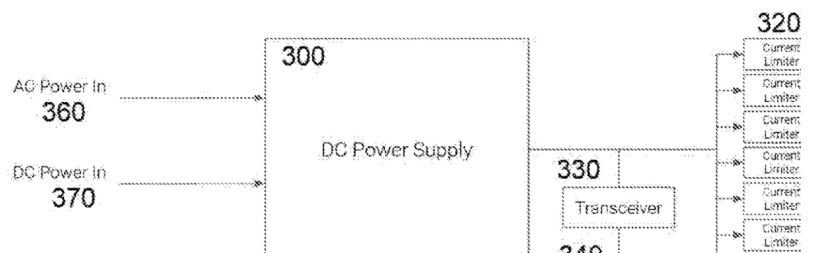
17, 2020. \*\*

1) **Int. Cl.**  
*F24F 11/63* (2018.01)  
*F24F 11/00* (2018.01)  
*G05B 15/02* (2006.01)  
*H02J 13/00* (2006.01)  
*H05B 47/175* (2020.01)

(S/)

**ABSTRACT**  
 A system for delivering power and data over a via a hub, wherein the hub can control and pow low-power Class 2 circuits. The hub can be remotely through a computing device such a phone or a computer.

**12 Claims, 3 Drawing Sheets**



## Why Patents Matter

Patents are more than just legal protections; they represent the culmination of creativity, technical expertise, and strategic foresight. By securing patents for our inventions, we ensure that our breakthroughs remain proprietary while fostering an environment where new ideas can thrive.

Today, we'll take a closer look at two key patents that illustrate our ongoing commitment to research and development.

## Key Patents

*Intelligent low-voltage power delivery system and method: Revolutionizing the electrification of smart buildings*

**Key Innovation:** This invention replaces traditional high-voltage AC wiring with a low-voltage DC system. A central power hub distributes both low-voltage power and high speed data over two-conductor cables in a branch

topology. This eliminates the need for separate control networks and separate hubs that do different things, making the system more robust, simpler, and more efficient.

**Impact:** Switching to low-voltage DC wiring significantly improves safety, eliminating risks of electrocution and electrical fires. It also enhances energy efficiency by avoiding AC-to-DC conversion losses—especially important in modern buildings where most devices already run on low-voltage DC power. The system reduces installation complexity and costs, allowing for easier modifications by any skilled labor. Additionally, direct wired communication improves connectivity, security, and automation responsiveness compared to DIY smart home setups.

**Example Use Case:** Domatic integrates this technology into its wiring system. In a modern, intelligent home, a single power hub connects to a standard or solar power source. Two-conductor low-voltage cables branch and daisy-chain to all fixtures, carrying both power and control signals. Any switch, sensor, or touchscreen can control multiple fixtures without complex wiring, and automation is easily configured through an app, making the system intuitive, flexible, and highly efficient.

*System and method for tunneling network requests to a device via a persistent connection: Advancing connected devices connectivity in a secured manner*

**How It Works:** This invention enables secure, persistent connections for smart devices, even behind firewalls, without complex configurations. Using cloud-based servers and load balancing, it efficiently routes connections, ensuring only authorized access. Multiple devices and users can share a single tunneled connection, reducing latency and enhancing real-time secure data exchange—ideal for security cameras, sensors and controls, and scientific instruments.

**Why It's Useful:** This system eliminates the need for manual firewall adjustments, making secure remote access simple and reliable. It ensures fast, encrypted communication, preventing unauthorized access while maintaining stability—critical for large-scale networked systems where efficiency, security, and seamless management are essential.

**What's Next?** Future advancements could include zero-trust security models, blockchain authentication, and AI-driven threat detection. Beyond connected devices, this technology could expand into enterprise networking, remote work security, and smart city infrastructure, shaping the future of secure, scalable connectivity.

## Looking Ahead

As we continue to innovate, our patent portfolio will expand, reflecting our ongoing efforts to shape the future of technology. We are committed to pioneering solutions that address today's challenges while anticipating tomorrow's opportunities.

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 Have questions about our patents or approach to innovation? Let's start a conversation!