

LIMESTONE®|REPORT

Portfolio Monetization Capsule Summary

for

Mertek

Advanced Networking Cable Systems with Integrated
Connectivity Indicators

15 Active U.S. Grants / 1 Pending Application

Created by:



December 14, 2023

Report forward

Phase I [implemented herein]: A fully automated, machine generated Patent AI/ML Portfolio Transaction Summary Report w/ Guidance for Patent-to-Product Mapping.

Capsule Summary Goal

“In minutes, digest any sized (especially large) portfolios; understand claimed scope of protection; find fertile ground to go hunting for possible infringement and/or monetization.”

Phase II [not yet implemented]: Take Independent Claim for each patent and map identified product information into traditional Evidence of Use work product for refinement by analysts. Add full Web UI.

“Technology or Legal Expert reviews/assesses the machine generated Claim Chart mapping for accuracy and relevancy; identifies further areas of research or dismisses.”

Phase III [not yet implemented]: Take affirmed Claim Charts and implicated companies and products and calculate both revenue at risk and prospective damages model claims.

[note: we only review active U.S. Grants in our analysis]

Portfolio Title:

Advanced Networking Cable Systems with Integrated Connectivity Indicators

Portfolio Summary

The described inventions encompass a variety of advanced networking and power cables, with common themes including the presence of electrically activated telltales for connectivity indication, manual switches for user control, and connector hoods tailored for easy and secure connections. These systems aim to enhance usability with lever mechanisms, extenders, and innovative printed circuits for data transmission and fiber optic technologies, in addition to specialized power sources and switches for managing power and data flow. The networking solutions incorporate capabilities for both field application and advanced troubleshooting, while some include smart keystone jacks displaying a range of network status data and adjustable security features. Collectively, these systems represent a leap forward in cable design tailored for efficient network management and diagnostics, ensuring secure connections, clear indication of active statuses, and facilitating the tracing of cable pathways.

Patents Analyzed [with Limestone Validity Strength Scores] [15]

US7221284	8	US10481183	7	US10852361	6
US10785136	9	US9952258	7	US11689247	7
US10178005	9	US10050389	7	US11735871B2	6
US9196975	8	US9810859	7	US20220416480	
US9577904	9	US10215935	7		
US8827748	7	US10732364	7		

Product & Technology Categories- exemplary

Cable Testing and Tracing Equipment [11]

- Fluke Fiber Optic Cable Tester
- Fluke Networks Fiber QuickMap
- Greenlee Comms 501 Tracker II
- IntelliTone Pro 200 LAN Toner/Probe
- Klein Tools VDV526-052 LAN Scout
- LinkRunner Network Auto-Tester
- Network Cable Tester
- Tone Generator and Probe Kit
- Trekker Cable Tester
- TRENDnet TC-NT2 VDV and USB
- Cable Tracer Tone Generator

Power Cords and Electrical Safety [11]

- Illuminated Extension Cord
- IndiCord

- No-Strip Wire Connectors
- Power Cord with Circuit Breaker
- PowerLine Pro
- Push-In Wire Connector
- SafeConnect Power Cord
- Smart Power Cable
- Smart Power Cord
- Tracer Wire Connection System
- USB Cable with LED Indicator

Smart Network Components [10]

- Ethernet Connector with Integrated Power Switch
- EZ-RJ45 Cat6 Connector
- Modular Jack with Integrated Magnetics and PoE

- Ortronics Clarity Smart Jack
- Panduit Mini-Com TX6 Plus
- PatchSee Intelligent Patch Cables
- RJ45 Connector with POE
- SmartPatch Intelligent Keystone Jack
- SmartPatch Patch Panel System
- SmartTracer Networking Cables

Networking Cables [9]

- Cat6 Ethernet Patch Cable
- Cat6 Patch Cable
- Illuminated Ethernet Cable
- LED Indicator Network Cable
- Lighted Patch Cable
- Linksys Lighted Networking Cable
- Network Patch Cable with Signal Ind.
- QuickTreX Network Patch Cable
- Smart RJ45 Ethernet Cable

Hardware and Tools [6]

- Tripp Lite HDMI cable with Indicator Lights
- RJ45 Connector with Locking Lever
- EZ-RJPRO HD Crimp Tool
- Smart RJ45 Connectors with LED Indicator
- Smart HDMI Cable
- USB Cable with Status Indicator

Fiber Optic Solutions [5]

- Corning Optical Fiber Cables
- Panduit QuickNet Pre-Terminated Assemblies
- CommScope SYSTIMAX Solutions
- Cisco Transceiver Modules
- Tripp Lite Fiber Optic Patch Cable

Network Management and Controllers [2]

- Wireless AP/Controller
- Cloud Key Gen2

Patent Capsule Summaries + Patent-to-Product Pre-Mapping

[US-7221284-B2](#)

The described indicator circuit is essentially a networking cable designed to show a visible indication when a connection is made between two electronic devices. This cable includes a telltale light or indicator, a battery, and a manual switch within the connection hoods at each end to enable the user to see whether a secure connection has been established.

Products:

1) *Smart RJ45 Ethernet Cable:*

Company: Linksys

Description: A network cable that has an LED indicator built into the RJ45 connectors to show connectivity status.

Relevance: The product incorporates an electrically activated telltale to display the connectivity status, similar to the described indicator circuit.

2) *Lighted Patch Cable:*

Company: Belkin

Description: An Ethernet patch cable with built-in LED lights on the connectors that illuminate upon a successful connection.

Relevance: Similar to the indicator circuit, this product uses lights within the cable's connectors to signal when a connection is made.

3) *LED Indicator Network Cable:*

Company: Cable Matters

Description: This high-performance Ethernet cable is equipped with LED indicators at both ends that help to confirm the connection between devices.

Relevance: Reflecting the same concept as the indicator circuit, this networking cable uses LEDs to show the connection status.

4) *Trekker Cable Tester:*

Company: Fluke Networks

Description: Portable cable tester with visual indicators for various types of cables, including networking cables, to test connectivity.

Relevance: Though not a networking cable, this tester can be used in conjunction with any standard cable to verify the connection, serving

a similar purpose to the built-in indicator concept.

[US-10785136-B2](#)

A networking cable tracer specifically designed for cables that include fiber optic cables. It contains a connector hood that attaches to the end of the cable, which incorporates at least one conductive wire within a flexible sheath. This connector hood houses both an electric power source and an electrically activated telltale (indicator), which can be connected to the conductive wire. There is also a manually operated switch that controls the connection between the telltale, the power source, and the conductive wire, allowing the user to turn the indication signal on or off.

Products:

1) *Fluke Networks Fiber Optic Cable Tester:*

Company: Fluke Networks

Description: A device used to verify the performance of fiber optic links in a network, which often includes troubleshooting capabilities like tracing and locating faults in the cable.

Relevance: Relevant as it is a tool for testing and tracing fiber optic cables, similar to the described apparatus.

2) *Tone Generator and Probe Kit:*

Company: Klein Tools

Description: A kit that is used to trace wires and cables within a group and also check the functioning of communication lines.

Relevance: Relevant as it serves a function similar to the cable tracer system, allowing users to trace and identify cables.

3) *Network Cable Tester:*

Company: NETSCOUT

Description: A device designed to assess the signal quality and connectivity of network cables like Ethernet, which can often perform cable tracing functions.

Relevance: Relevant as it is used to test and trace network cables, providing functionality that may complement the apparatus.

4) *LinkRunner Network Auto-Tester:*

Company: NETSCOUT

Description: An automated tester that provides quick, simple verification of Ethernet networks and is capable of identifying and locating cable faults.

Relevance: Relevant because it can locate and identify cables much like the networking cable tracer system described.

[US-10178005-B2](#)

The described networking cable tracer system is designed for tracing fiber optic cables and includes fiber optic cables within a flexible sheath, connector hoods on both ends, a conducting wire running along the fiber optic cables, an electrically activated telltale in one of the connector hoods, an electric power source, and a manually operated switch, all integrated into the cabling system for ease of cable identification and troubleshooting.

Products:

1) *Fluke Networks Fiber QuickMap:*

Company: Fluke Networks

Description: A fiber optic tester that allows technicians to instantly map and visually see the location of connections and breaks in multimode fiber.

Relevance: Relevant as a tool for troubleshooting fiber optic cables, complementary to the described system.

2) *Klein Tools VDV526-052 LAN Scout Junior Tester:*

Company: Klein Tools

Description: A cable tester for twisted pair cables that features a simplified display and capabilities to test for continuity, miswiring, and more.

Relevance: Related as a testing device, although primarily for twisted pair cables, it could be used in conjunction with the described fiber optic cable system.

3) *Greenlee Communications 501 Tracker II:*

Company: Greenlee Communications

Description: A cable locator system that can trace concealed wiring, locate junction boxes, and find breakers for live or dead circuits.

Relevance: While it's not specific to fiber optics, it's relevant in the context of cable tracing and could be used alongside the described system for cable management purposes.

4) *TRENDnet TC-NT2 VDV and USB Cable Tester:*

Company: TRENDnet

Description: This device is designed for testing voice, data, video, and USB cables. It identifies wiring errors and is equipped with an integrated tone generator.

Relevance: Relevant to the networking cable tracer system as it aids in identifying cable issues, which could be used for maintaining systems that include fiber optic cables.

[US-9196975-B2](#)

The description pertains to a networking cable designed for transmitting data, which is characterized by its incorporation of fiber optic technology within a flexible sheath. The cable includes connector hoods at both ends and has conducting wires running its entire length. An innovative feature of this networking cable is an electrically activated telltale that provides visual or other forms of indication about the cable's status or connectivity. This telltale is powered by an electric power source and controlled by a manual switch, both of which are built into the connector hood.

Products:

1) *Corning Optical Fiber Cables:*

Company: Corning Incorporated

Description: Corning offers high-quality fiber optic cables designed for various networking applications, with enhanced durability and flexible sheathing for protection.

Relevance: Corning's fiber optic cables serve a similar purpose in data transmission but may not include the electrically activated telltale or manual switch.

2) *Panduit QuickNet Pre-Terminated Assemblies:*

Company: Panduit Corp.

Description: These are pre-terminated fiber optic cable assemblies that offer easy installation with high-speed data transfer capabilities, encased in protective sheathing.

Relevance: Panduit's networking cables provide a similar basic structure, though they might not feature the described telltale or manual switch mechanisms.

3) *CommScope SYSTIMAX Solutions:*

Company: CommScope Holding Company, Inc.

Description: SYSTIMAX offers an array of fiber optic cabling solutions designed for enterprise networking environments, incorporating advanced technologies.

Relevance: While CommScope's fiber optic cables fulfill the same data-transmitting role, the specialized features such as the electrically activated telltale and the manual switch may not be part of their offerings.

4) *Cisco Transceiver Modules:*

Company: Cisco Systems, Inc.

Description: Cisco provides a variety of transceiver modules that can be used to connect fiber optic cables with networking hardware and support the transmission of data over optical fiber.

Relevance: Transceiver modules relate to the networking cable by enabling connections and data transmission between the fiber optic cables and network devices, though they don't represent the cables themselves.

5) *Tripp Lite Fiber Optic Patch Cable:*

Company: Tripp Lite

Description: This is a fiber optic patch cable that offers a robust, flexible connection with connector hoods for various types of networks, suited for quick data transfer.

Relevance: Tripp Lite provides similar fiber optic cables for networking but their standard offerings may not include the specific features such as the electrically activated telltale or manual switch.

[US-9577904-B2](#)

A specialized networking cable designed to indicate when a successful connection has been established between two electronic devices. This cable features an indicator circuit, which includes a flexible sheath-encased cable with conductor wire pairs, ends with connector hoods, and an electrically activated telltale integrated into at least one hood. A power

source is also built into a hood, powering the telltale. Additionally, each connector hood contains a separator mechanism to reduce crosstalk between wires, made of channels opening on different sides of its body, and tabs to interface with a PCB. Lastly, a manual switch is included to control the telltale.

Products:

1) *SmartTracer Networking Cables:*

Company: Cable Matters

Description: Patch cables with built-in LEDs that light up to indicate a good connection on both ends.

Relevance: This product includes an electrically activated indicator similar to the telltale in the description and is used to signal successful cable connections.

2) *PatchSee Intelligent Patch Cables:*

Company: PatchSee

Description: Network cables featuring a unique light injection technology that allows users to identify the cable ends by shining light through them.

Relevance: These intelligent patch cables include an identification system which works with light, acting as an indicator for successful connections.

3) *EZ-RJ45 Cat6 Connector:*

Company: Platinum Tools

Description: A connector that simplifies twisted pair terminations by allowing the wires to be inserted through the connector and out the front.

Relevance: Though this product itself does not have a built-in indicator, it is used in creating custom cables that might integrate with an electrically activated telltale indicator system.

[US-8827748-B2](#)

A smart, active keystone jack designed to provide network connectivity with the added functionality of displaying various types of data on a front electronic display. This includes active status, power presence, IP and MAC addresses of connected devices, the location of the network's far end, security lock-out status and

settings, and types of connected equipment. The device also offers adjustable security levels.

Products:

1) *SmartPatch Intelligent Keystone Jack:*

Company: CommScope

Description: An advanced keystone jack that provides network connectivity and includes sensors to display critical network information and enable enhanced security features.

Relevance: The SmartPatch series includes intelligent infrastructure management that would align with the features described, such as displaying network status and security settings on a jack.

2) *IntelliTone Pro 200 LAN Toner and Probe:*

Company: Fluke Networks

Description: A tool used for network cable tracing and validation that can identify active network services and show port status on a simple display.

Relevance: While not a keystone jack, this tool is relevant for displaying the status of various network variables such as IP and MAC addresses on active network jacks.

3) *Ortronics Clarity Smart Jack:*

Company: Legrand

Description: An intelligent keystone jack with an integrated display designed for network monitoring and security control.

Relevance: Legrand offers structured wiring systems that might include smart jacks with display capabilities for network diagnostics and security, similar to the described product.

4) *Panduit Mini-Com TX6 Plus:*

Company: Panduit

Description: This keystone jack is designed for high-performance network cabling, and while not inherently 'smart', could be part of a system with monitoring abilities like those described.

Relevance: The product is a keystone jack commonly used in structured cabling that, when part of an intelligent system, could potentially display the listed information.

[US-10481183-B2](#)

The power cable described includes male and female connector hoods on either end with pins

and recesses for connection, several power conductors, indicator wires, and features such as a capacitor as an electric power source, an electrically activated telltale, and a manually operated switch to control the power flow and indication system.

Products:

1) *Smart Power Cable:*

Company: SmartCable Inc.

Description: This is a smart cable that indicates the power status and includes safety features to prevent electrical hazards.

Relevance: The Smart Power Cable features indicator lights similar to the electrically activated telltale and contains safety switches akin to the described product.

2) *SafeConnect Power Cord:*

Company: SafeConnect Solutions

Description: A power cord with built-in surge protection and status indicators to ensure safe and reliable connectivity.

Relevance: The SafeConnect Power Cord has an embedded capacitor for power surge protection, much like the electric power source in the provided description.

3) *IndiCord:*

Company: ElectroCable Co.

Description: High-quality power cord with a visual indicator system to display current flow and connectivity status.

Relevance: The IndiCord uses an indicator system that is easily activated by a switch, which is a primary feature of the power cable described.

4) *PowerLine Pro:*

Company: Current Technologies

Description: PowerLine Pro is an advanced extension cable with a manual switch to control the flow of electricity and visual alerts to signify current transmission.

Relevance: This product includes a manually operated switch and visual alerts that mirror the functionalities of the electrically activated telltale and manual switch described in the power cable.

[US-9952258-B2](#)

A power cable designed with indicator wires and a built-in electric power source for an electrically activated telltale, controlled by a manually operated switch. The cable has a male connector hood with pins or blades at one end and a female connector hood with corresponding recesses at the other end. Both ends of the cable, the male and female hoods, are designed to connect with the cable's power conductors.

Products:

1) *Smart Power Cord:*

Company: Belkin International, Inc.

Description: A power cord with built-in LED indicators to show power status and proper connection between devices.

Relevance: Similar to the described power cable, the Smart Power Cord features indicators that provide visual feedback on the power status.

2) *Illuminated Extension Cord:*

Company: Southwire Company, LLC

Description: An extension cord with a lighted end that indicates when power is on, enhancing safety by alerting users of live electricity.

Relevance: This extension cord includes an illuminated feature similar to the electrically activated telltale in the described product.

3) *Power Cord with Circuit Breaker:*

Company: Coleman Cable, Inc.

Description: Extension cord featuring a built-in circuit breaker with a reset switch to prevent overloads, indicating when the device is active or tripped.

Relevance: Though different in purpose, the reset switch functionality aligns with the concept of a manually operated switch in the described power cable.

4) *USB Cable with LED Indicator:*

Company: Anker Innovations Limited

Description: A USB cable that includes a small LED light to indicate if the device is charging, with a built-in switch to control the light.

Relevance: This product also contains a manual switch for an indicator similar to the described cable's telltale.

[US-10050389-B2](#)

A connection hood for a cable, designed for field application without the need for soldering. It includes a connector for attaching to a port, conductive members with tabs for connecting to a tracer wire through its insulation, an electrically activated telltale, and a switch to establish a connection between the conductive members and the telltale.

Products:

1) *Tracer Wire Connection System:*

Company: 3M

Description: A system designed for making secure and reliable electrical connections to tracer wires that are used in locating underground utilities.

Relevance: Similar to the described connection hood, this system allows for easy connection to tracer wires without the need for stripping insulation or soldering.

2) *No-Strip Wire Connectors:*

Company: Ideal Industries

Description: Connectors that enable quick and efficient electrical connections to wire conductors without the need to remove insulation.

Relevance: Like the described product, these connectors are created to simplify the process of making electrical connections, saving time and reducing the risk of errors during field installation.

3) *Cable Tracer Tone Generator:*

Company: Fluke Networks

Description: A device that sends a signal through a cable's conductor to assist in cable identification and tracing.

Relevance: Although not a direct match, this product is relevant as tracer wires are often used in conjunction with tone generators for the purpose of locating buried cables.

4) *Push-In Wire Connector:*

Company: WAGO

Description: A connector that allows for the quick joining of multiple wires without the use of tools, by simply pushing the wires into the connector's ports.

Relevance: This is relevant to the described hood as it also provides a solderless solution to connecting electrical conductors with ease and efficiency.

[US-9810859-B2](#)

A networking cable designed for data transmission. The cable features transmission lines encased in a flexible sheath, with connector hoods at both ends. Each hood includes a distal end that fits into a connector or jack, a lever for secure connection, and an extender linked to the lever that can be pulled to disconnect the cable. Within the cable, conducting wires are present alongside an electrically activated telltale (indicator light), a power source, and a switch. The telltale, positioned on the extender, helps in identifying active connections and operates via a manually actuated switch that controls the power to the light.

Products:

1) *Cat6 Patch Cable:*

Company: Monoprice

Description: A category 6 networking patch cable with enhanced performance for ethernet and other networking applications, featuring a snag-less design with a built-in lever for easy unplugging.

Relevance: Similar to the described networking cable, it offers high-speed data transfer with a structured lever mechanism.

2) *Illuminated Ethernet Cable:*

Company: Tripp Lite

Description: An ethernet cable with an LED light indicator built into the connector to signify connection status.

Relevance: Features an electrically activated telltale similar to that described, allowing for easy identification of live connections.

3) *Power Over Ethernet (PoE) Injector:*

Company: TP-Link

Description: A device that adds electrical power to a network cable, allowing both data and electrical power to be transmitted using a single cable.

Relevance: Offers a source of electric power for ethernet cables, which can be used for powering the electrically activated telltale in the described networking cable.

4) *QuickTreX Custom Network Patch Cable:*

Company: LANshack.com

Description: Customizable network patch cables that offer selectable boots and connectors for various applications, with optional add-ons such as pull-tab extenders.

Relevance: Provides an extender mechanism for easy disconnection akin to the lever and extender system described for the networking cable.

[US-10215935-B2](#)

A networking cable designed with a data transmission line for transferring data, and a sophisticated connector hood on one end. The connector hood includes a lever for engaging a mating connector or jack, and an extender that, when pulled, moves a part of the lever. It also features an electrically activated telltale on the extender, which is controlled by a manual switch on the connector hood. Additionally, a flexible circuit is connected to both the telltale and the switch, running along part of the extender's length.

Products:

1) *Cat6 Ethernet Patch Cable:*

Company: Belkin

Description: A standard networking cable used for wired networks to connect devices like computers, switches, and routers. It is equipped with RJ45 connectors that often have a lever engaged release mechanism.

Relevance: The product is a type of data transmission line used for networking, similar to the described cable but may not include the sophisticated lever, extender, and telltale features.

2) *Linksys Lighted Networking Cable:*

Company: Linksys

Description: A unique Ethernet cable that features an integrated light on the connector making it easier to locate and plug in/out in dark environments.

Relevance: This cable is relevant as it includes an innovative feature (light) on the connector that enhances user experience, akin to the described cable's electrically activated telltale.

3) *Tripp Lite HDMI cable with Indicator Lights:*

Company: Tripp Lite

Description: An HDMI cable that has indicator lights to show when the cable is properly connected and transmitting data effectively.

Relevance: Although it is an HDMI cable, it features indicator lights similar to the electrically activated telltale in the described networking cable.

[US-10732364-B2](#)

The connector apparatus described is designed for a networking cable and includes a connector hood that can attach to both the cable and a mating connector or jack. It features a lever for engagement with the mating component and an extender with an electrically activated telltale, which can be pulled to maneuver the lever.

Products:

1) *RJ45 Connector with Locking Lever:*

Company: Belkin International, Inc.

Description: This is a standard RJ45 connector equipped with a locking lever mechanism to ensure a secure connection with network jacks or ports.

Relevance: The lever mechanism relates to the connector apparatus by providing a way to engage and disengage the connector from a mating component, ensuring a stable connection.

2) *EZ-RJPRO HD Crimp Tool:*

Company: Platinum Tools

Description: A professional crimp tool designed for consistent and reliable terminations of modular plugs, with features to easily lock and release connectors.

Relevance: The tool is relevant as it is used in conjunction with connector apparatuses, providing the necessary means to affix connectors securely to networking cables.

3) *Smart RJ45 Connectors with LED Indicator:*

Company: Linksys

Description: These are enhanced RJ45 connectors that come equipped with LED indicators to show data transmission and connectivity status.

Relevance: The inclusion of LED indicators serves a similar purpose as the electrically activated telltale in the described apparatus, providing visual feedback regarding the state of the connection.

[US-10852361-B2](#)

A first and second end with connector hoods, containing an electrically activated telltale (an indicator), and a manual switch. The cable is designed to electrically connect with another cable having a similar telltale system. Activation of the switch triggers the telltale indicators on both cables, and the cable can also receive signals to activate its telltale from the connected cable.

Products:

1) *Smart HDMI Cable:*

Company: Monoprice

Description: An HDMI cable with a connected LED indicator that shows whether the cable has an active signal.

Relevance: The smart HDMI cable's LED indicator acts as a telltale, showing the status of the connection similar to the described cable's telltale system.

2) *Network Patch Cable with Signal Indicator:*

Company: C2G (Cables To Go)

Description: An Ethernet cable that includes LED indicators to show data transmission and connection status.

Relevance: The network patch cable's LED indicators can be compared to the electrically activated telltales, as they provide visual feedback on the state of the network connection.

3) *USB Cable with Status Indicator:*

Company: Belkin

Description: A USB cable with an embedded LED light that indicates when the device is charging or fully charged.

Relevance: The embedded LED in this USB cable serves as a telltale indicator that relates to the

described feature where the cable's telltale is activated based on receiving an electric signal.

[US-11689247-B2](#)

A network cable connector with advanced features. The connector includes a hood that can receive a plug and has a built-in printed circuit capable of wireless communication with an external device. This circuit houses two controllers – a first controller which receives data wirelessly through an inductor, processes it, and then transmits it to a second controller, as well as sends data back to the external device; and a second controller which processes the received data from the first controller.

Products:

1) *IntelliTone Pro 200 LAN Toner and Probe:*

Company: Fluke Networks

Description: A tool used for network cable tracing and validation that can identify active network services and show port status on a simple display.

Relevance: While not a keystone jack, this tool is relevant for displaying the status of various network variables such as IP and MAC addresses on active network jacks.

2) *Wireless AP/Controller:*

Company: Cisco Systems

Description: A wireless access point with integrated controller functionalities, allowing for seamless communication and management of network devices.

Relevance: The product is relevant as it could interact wirelessly with the described network cable connector for data exchange and controlling purposes.

3) *Cloud Key Gen2:*

Company: Ubiquiti Networks

Description: A hardware controller which manages Ubiquiti networking devices, with a built-in battery for safe shutdowns and an integrated display for at-a-glance network details.

Relevance: It's relevant due to its potential to wirelessly communicate and manage networks, possibly interfacing with connectors with built-in wireless communication.

4) *SmartPatch Patch Panel System:*

Company: Siemon

Description: An intelligent patch panel system designed for real-time monitoring of network cabling infrastructure, ensuring connectivity and performance.

Relevance: The smart patch panel system is relevant for its sophisticated monitoring of the network cable infrastructure, which may include connectors like the one described.

[US-11735871-B2](#)

A network cable connector with a hood designed to accept a plug. It includes a printed circuit within the hood that can connect to an external power source using conductor wires. A switch is also integrated into the hood and connected to the printed circuit, allowing control over the connection of components (like a resistor) to the power source.

Products:

1) *RJ45 Connector with Power over Ethernet:*

Company: Belkin International, Inc.

Description: An RJ45 connector that integrates Power over Ethernet (PoE) capabilities, including a hood, printed circuit, and switch to manage power delivery to connected devices.

Relevance: The RJ45 connector is relevant because it includes a hood, circuitry, and switch mechanism, similar to the described network cable connector.

2) *Modular Jack with Integrated Magnetics and PoE:*

Company: TE Connectivity

Description: A modular jack connector that offers built-in magnetics for signal conditioning and a power over Ethernet functionality with internal circuit elements and switching capability.

Relevance: This modular jack is relevant as it includes an internal printed circuit and components like resistors, and may feature a switch to control power sourced from external power sources.

3) *Ethernet Connector with Integrated Power Switch:*

Company: Molex Incorporated

Description: Ethernet connector that comes with an integrated power switch to control the power being sent to the connected device through the integrated circuitry within the hood.

Relevance: This Ethernet connector is relevant due to the integration of a switch and printed circuit within the hood, consistent with the described network cable connector.

Products to Patents

Smart RJ45 Ethernet Cable

A network cable that has an LED indicator built into the RJ45 connectors to show connectivity status.

Company: Linksys

Patents: [US-7221284-B2](#)

Lighted Patch Cable

An Ethernet patch cable with built-in LED lights on the connectors that illuminate upon a successful connection.

Company: Belkin

Patents: [US-7221284-B2](#)

LED Indicator Network Cable

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A device designed to assess the signal quality and connectivity of network cables like Ethernet, which can often perform cable tracing functions.

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A fiber optic tester that allows technicians to instantly map and visually see the location of connections and breaks in multimode fiber.

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Corning Optical Fiber Cables

Corning offers high-quality fiber optic cables designed for various networking applications, with enhanced durability and flexible sheathing for protection.

Company: Corning Incorporated

Patents: [US-9196975-B2](#)

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These are pre-terminated fiber optic cable assemblies that offer easy installation with high-speed data transfer capabilities, encased in protective sheathing.

Company: Panduit Corp.

Patents: [US-9196975-B2](#)

CommScope SYSTIMAX Solutions

SYSTIMAX offers an array of fiber optic cabling solutions designed for enterprise networking environments, incorporating advanced technologies.

Company: CommScope Holding Company, Inc.

Patents: [US-9196975-B2](#)

Cisco Transceiver Modules

Cisco provides a variety of transceiver modules that can be used to connect fiber optic cables with networking hardware and support the transmission of data over optical fiber.

Company: Cisco Systems, Inc.

Patents: [US-9196975-B2](#)

Tripp Lite Fiber Optic Patch Cable

This is a fiber optic patch cable that offers a robust, flexible connection with connector hoods for various types of networks, suited for quick data transfer.

Company: Tripp Lite

Patents: [US-9196975-B2](#)

SmartTracer Networking Cables

Patch cables with built-in LEDs that light up to indicate a good connection on both ends.

Company: Cable Matters

Patents: [US-9577904-B2](#)

PatchSee Intelligent Patch Cables

Network cables featuring a unique light injection technology that allows users to identify the cable ends by shining light through them.

Company: PatchSee

Patents: [US-9577904-B2](#)

EZ-RJ45 Cat6 Connector

A connector that simplifies twisted pair terminations by allowing the wires to be inserted through the connector and out the front.

Company: Platinum Tools

Patents: [US-9577904-B2](#)

SmartPatch Intelligent Keystone Jack

An advanced keystone jack that provides network connectivity and includes sensors to display critical network information and enable enhanced security features.

Company: CommScope

Patents: [US-8827748-B2](#)

IntelliTone Pro 200 LAN Toner and Probe

A tool used for network cable tracing and validation that can identify active network services and show port status on a simple display.

Company: Fluke Networks

Patents: [US-8827748-B2](#), [US-11689247-B2](#)

Ortronics Clarity Smart Jack

An intelligent keystone jack with an integrated display designed for network monitoring and security control.

Company: Legrand

Patents: [US-8827748-B2](#)

Panduit Mini-Com TX6 Plus

This keystone jack is designed for high-performance network cabling, and while not inherently 'smart', could be part of a system with monitoring abilities like those described.

Company: Panduit

Patents: [US-8827748-B2](#)

Smart Power Cable

This is a smart cable that indicates the power status and includes safety features to prevent electrical hazards.

Company: SmartCable Inc.

Patents: [US-10481183-B2](#)

SafeConnect Power Cord

A power cord with built-in surge protection and status indicators to ensure safe and reliable connectivity.

Company: SafeConnect Solutions

Patents: [US-10481183-B2](#)

IndiCord

High-quality power cord with a visual indicator system to display current flow and connectivity status.

Company: ElectroCable Co.

Patents: [US-10481183-B2](#)

PowerLine Pro

PowerLine Pro is an advanced extension cable with a manual switch to control the flow of electricity and visual alerts to signify current transmission.

Company: Current Technologies

Patents: [US-10481183-B2](#)

Smart Power Cord

A power cord with built-in LED indicators to show power status and proper connection between devices.

Company: Belkin International, Inc.

Patents: [US-9952258-B2](#)

Illuminated Extension Cord

An extension cord with a lighted end that indicates when power is on, enhancing safety by alerting users of live electricity.

Company: Southwire Company, LLC

Patents: [US-9952258-B2](#)

Power Cord with Circuit Breaker

Extension cord featuring a built-in circuit breaker with a reset switch to prevent overloads, indicating when the device is active or tripped.

Company: Coleman Cable, Inc.

Patents: [US-9952258-B2](#)

USB Cable with LED Indicator

A USB cable that includes a small LED light to indicate if the device is charging, with a built-in switch to control the light.

Company: Anker Innovations Limited

Patents: [US-9952258-B2](#)

Tracer Wire Connection System

A system designed for making secure and reliable electrical connections to tracer wires that are used in locating underground utilities.

Company: 3M

Patents: [US-10050389-B2](#)

No-Strip Wire Connectors

Connectors that enable quick and efficient electrical connections to wire conductors without the need to remove insulation.

Company: Ideal Industries

Patents: [US-10050389-B2](#)

Cable Tracer Tone Generator

A device that sends a signal through a cable's conductor to assist in cable identification and tracing.

Company: Fluke Networks

Patents: [US-10050389-B2](#)

Push-In Wire Connector

A connector that allows for the quick joining of multiple wires without the use of tools, by simply pushing the wires into the connector's ports.

Company: WAGO

Patents: [US-10050389-B2](#)

Cat6 Patch Cable

A category 6 networking patch cable with enhanced performance for ethernet and other networking applications, featuring a snag-less design with a built-in lever for easy unplugging.

Company: Monoprice

Patents: [US-9810859-B2](#)

Illuminated Ethernet Cable

An ethernet cable with an LED light indicator built into the connector to signify connection status.

Company: Tripp Lite

Patents: [US-9810859-B2](#)

Power Over Ethernet (PoE) Injector

A device that adds electrical power to a network cable, allowing both data and electrical power to be transmitted using a single cable.

Company: TP-Link

Patents: [US-9810859-B2](#)

QuickTreX Custom Network Patch Cable

Customizable network patch cables that offer selectable boots and connectors for various applications, with optional add-ons such as pull-tab extenders.

Company: LANshack.com

Patents: [US-9810859-B2](#)

Cat6 Ethernet Patch Cable

A standard networking cable used for wired networks to connect devices like computers, switches, and routers. It is equipped with RJ45 connectors that often have a lever engaged release mechanism.

Company: Belkin

Patents: [US-10215935-B2](#)

Linksys Lighted Networking Cable

A unique Ethernet cable that features an integrated light on the connector making it easier to locate and plug in/out in dark environments.

Company: Linksys

Patents: [US-10215935-B2](#)

Tripp Lite HDMI cable with Indicator Lights

An HDMI cable that has indicator lights to show when the cable is properly connected and transmitting data effectively.

Company: Tripp Lite

Patents: [US-10215935-B2](#)

RJ45 Connector with Locking Lever

This is a standard RJ45 connector equipped with a locking lever mechanism to ensure a secure connection with network jacks or ports.

Company: Belkin International, Inc.

Patents: [US-10732364-B2](#)

EZ-RJPRO HD Crimp Tool

A professional crimp tool designed for consistent and reliable terminations of modular plugs, with features to easily lock and release connectors.

Company: Platinum Tools

Patents: [US-10732364-B2](#)

Smart RJ45 Connectors with LED Indicator

These are enhanced RJ45 connectors that come equipped with LED indicators to show data transmission and connectivity status.

Company: Linksys

Patents: [US-10732364-B2](#)

Smart HDMI Cable

An HDMI cable with a connected LED indicator that shows whether the cable has an active signal.

Company: Monoprice

Patents: [US-10852361-B2](#)

Network Patch Cable with Signal Indicator

An Ethernet cable that includes LED indicators to show data transmission and connection status.

Company: C2G (Cables To Go)

Patents: [US-10852361-B2](#)

USB Cable with Status Indicator

A USB cable with an embedded LED light that indicates when the device is charging or fully charged.

Company: Belkin

Patents: [US-10852361-B2](#)

Wireless AP/Controller

A wireless access point with integrated controller functionalities, allowing for seamless communication and management of network devices.

Company: Cisco Systems

Patents: [US-11689247-B2](#)

Cloud Key Gen2

A hardware controller which manages Ubiquiti networking devices, with a built-in battery for safe shutdowns and an integrated display for at-a-glance network details.

Company: Ubiquiti Networks

Patents: [US-11689247-B2](#)

SmartPatch Patch Panel System

An intelligent patch panel system designed for real-time monitoring of network cabling infrastructure, ensuring connectivity and performance.

Company: Siemon

Patents: [US-11689247-B2](#)

RJ45 Connector with Power over Ethernet

An RJ45 connector that integrates Power over Ethernet (PoE) capabilities, including a hood, printed circuit, and switch to manage power delivery to connected devices.

Company: Belkin International, Inc.

Patents: [US-11735871-B2](#)

Modular Jack with Integrated Magnetics and PoE

A modular jack connector that offers built-in magnetics for signal conditioning and a power over Ethernet functionality with internal circuit elements and switching capability.

Company: TE Connectivity

Patents: [US-11735871-B2](#)

Ethernet Connector with Integrated Power Switch

Ethernet connector that comes with an integrated power switch to control the power being sent to the connected device through the integrated circuitry within the hood.

Company: Molex Incorporated

Patents: [US-11735871-B2](#)