

Article Overview

Communication optical cable products are covered by numerous patents focusing on fiber arrangement, bend resistance, waterproofing, and high-capacity designs.

Key Patent Examples

- o EP4325265 - Optical Cable with Tubular Optical Units This patent describes an optical cable including tubular members that house multiple optical fibers. The design optimizes the space factor to minimize optical loss, maintain fiber integrity under bending or compression, ensure waterproof performance, and reduce the overall cable diameter. It also addresses the accommodation of rollable optical fiber ribbons for high-capacity networks, balancing compactness with reliable performance .
- o GB8419751D0 - Helically Grooved Optical Fiber Core This patent covers a method for producing an optical fiber cable where a thermoplastic core with longitudinal grooves is extruded around a conductor. Fibers are inserted into the grooves, and the core is twisted helically to improve flexibility and mechanical stability. This design enhances fiber protection and cable durability under mechanical stress .
- o OCC Patents - Optical Cable Corporation OCC provides a list of patents covering various optical cable products, including Category 6A jacks, fiber connectivity solutions, and harsh environment connectivity. These patents protect both the cable components and the assembly methods, ensuring compatibility, shielding, and performance in demanding conditions .

Searching for Optical Cable Patents

- o Google Patents allows searching by keywords, patent numbers, or Cooperative Patent Classifications (CPCs) relevant to optical cables. Boolean logic and phrase searches can refine results .
- o WIPO PATENTSCOPE provides access to international and national patent collections, including PCT applications, with advanced search features and relevance ranking .

Considerations

When exploring patents for communication optical cables, key aspects include:

- o Fiber arrangement and bundling (individual fibers vs. rollable ribbons)
- o Mechanical protection (helical grooves, tubular members)
- o Environmental resistance (waterproofing, impact resistance)
- o High-capacity network support (minimizing outer diameter while maintaining performance) These patents collectively cover innovations that improve signal integrity, durability, and installation efficiency in modern optical communication networks.

Patents for Communication Optical Cable Products

Optical Cable Corporation ("OCC ® ") is a leading manufacturer of a broad range of fiber optic and copper data

Abstract: Optical fibers of a multi-fiber cable are grouped into connection units. The distal ends of the fibers of each

A method and system for fiber optic communication and sensing (FOCS) may include transmitting one or more

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Various example embodiments for supporting distributed fiber optic sensing via a fiber optic cable may be configured to support

In another embodiment, a fiber optic communications network includes a fiber optic distribution cable, at least one fiber optic drop

Abstract: An optical communication cable is provided having a cable body with an inner surface defining a passage

The telecommunications cable of the invention comprises a series of optical fibers which are preferably coated with

An optical cable has a large bandwidth and is heavy and bulky compared to an existing copper cable and thus is very

The fiber optic cable may exclude a grease or a grease-like composition being in contact with the at least one bundle for filling

An optical fiber connector sub-assembly a ferrule holder configured to hold a ferrule at a front portion of an optical fiber connector, a

Abstract: A fanout tube for a furcation of a fiber optic cable assembly carrying a plurality of optical fibers includes an outer casing

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Patents for Communication Optical Cable Products

Fiber optics players are focusing on leveraging new revenue sources such as FTTX, Data Center Interconnect (DCI), and subsea

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M2 Optics is proud to have been awarded the following patents in the arena of fiber optic technology:

Web: <https://www.kremgroup.co.za>

