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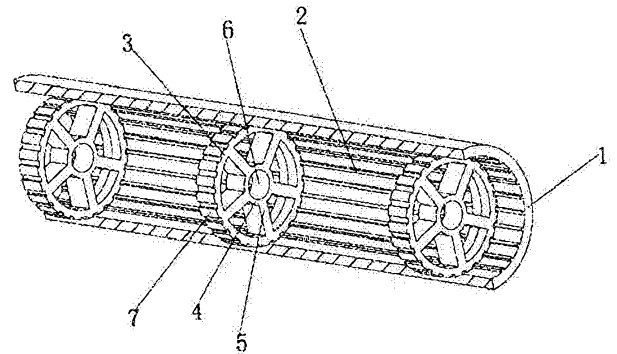
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CABLE WITH CABLE PARTITIONING COMPONENTS.

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The present invention provides a cable with cable partitioning components. The cable with cable partitioning components comprises an outer sheath (1) and a plurality of spaced partitioning rings (3); in each partitioning ring (3), a partitioning board is disposed, the partitioning board comprises a center ring (4) and a plurality of support plates (5), the support plates (5) are uniformly distributed around the axis of the center ring (4), a center hole (6) is formed in the center ring (4), and two ends of each support plate (5) are respectively fixed on the outer wall of the center ring (4) and the inner wall of the partitioning ring (3); and the outer sheath (1) covers the partitioning rings (3). The cable with cable partitioning components, provided by the present invention, has the beneficial effects that cable harnesses in the cable are effectively partitioned with each other, and the fact that the cable harnesses are not mixed can be ensured even if cable tapes are not completely wound around the cable harnesses.



BACKGROUND

5 **Technical Field**

The present invention relates to a cable with cable partitioning components.

Related Art

10 In the prior art, the interior of a common cable in the current market has a wound paper tape, and the paper tape has high hardness and large dielectric constant, so that the cable has low flexibility and has a possibility of failing in a bending test; and the cable has high impedance, so that signal loss generated in transmission is large, and sometimes high requirements of customers cannot be met.

15 **Summary**

In view of disadvantages in the prior art, an objective of the present invention is to provide a cable with cable partitioning components.

In order to achieve the objective described above, a technical scheme adopted by the present invention is as follows:

20 a cable with cable partitioning components comprises an outer sheath and a plurality of spaced partitioning rings; in each partitioning ring, a partitioning board is disposed, the partitioning board comprises a center ring and a plurality of support plates, the support plates are uniformly distributed around the axis of the center ring, a center hole is formed in the center ring, and two ends of each support plate are
25 respectively fixed on the outer wall of the center ring and the inner wall of the partitioning ring; and the outer sheath covers the partitioning rings.

Preferably, a plurality of bulges are uniformly distributed on the outer wall of each partitioning ring.

30 Preferably, the inner wall of the outer sheath is provided with a plurality of raised lines, and the raised lines are arranged at intervals and are uniformly distributed

around the axis of the outer sheath.

Preferably, the material of the outer sheath is thermoplastic polyvinyl chloride PVC, polyethylene, a halogen-free flame retardant material or chloroprene rubber.

By adopting the foregoing technical scheme, the cable with cable partitioning components, provided by the present invention, has the following advantages and beneficial effects: cable harnesses in the cable are effectively partitioned with each other, and the fact that the cable harnesses are not mixed can be ensured even if cable tapes are not completely wound around the cable harnesses.

10 **Brief Description of Drawings**

FIG. 1 is a half-section schematic diagram of the whole structure of the present invention.

Description of Embodiments

15 Embodiments of the present invention are described below in detail in conjunction with accompanying drawings, but the present invention may be implemented by various manners limited and covered by the appended claims.

As shown in FIG. 1, a cable with cable partitioning components, provided by the present invention, comprises an outer sheath 1 and a plurality of spaced partitioning rings 3; in each partitioning ring 3, a partitioning board is disposed, the partitioning board comprises a center ring 4 and a plurality of support plates 5, the support plates 5 are uniformly distributed around the axis of the center ring 4, a center hole 6 is formed in the center ring 4, and two ends of each support plate 5 are respectively fixed on the outer wall of the center ring 4 and the inner wall of the partitioning ring 3; and the outer sheath 1 covers the partitioning ring 3.

In use, a ground wire of the cable penetrates through each center ring 6, and other cable harnesses penetrate through spaces in each support plate 5; in the cable, the partitioning rings are arranged at intervals to partition the cable harnesses with each other, and cable tapes are wound around parts, located between two adjacent partitioning rings, of the cable harnesses; due to partitioning and gathering functions

of the partitioning ring 3, the cable tapes do not need to be wound around the whole cable; therefore, materials are saved; and an insulating sheath at the exterior of each cable harness can be conveniently torn off in a cable connecting procedure, which is convenient and practical.

5 A plurality of bulges 7 are uniformly distributed on the outer wall of each partitioning ring 3; when the outer sheath 1 covers the exterior of the cable, the outer sheath 1 may be bonded on the outer wall of each partitioning ring 3 by utilizing a thermal compression bonding manner; and due to the arrangement of the bulges 7, the bonding area of the outer sheath 1 and the outer wall of each partitioning ring 3
10 are increased.

The inner wall of the outer sheath 1 is provided with a plurality of raised lines 2, the raised lines 2 are arranged at intervals and are uniformly distributed around the axis of the outer sheath 1, and the raised lines 2 match with the bulges 7 to increase the bonding area.

15 The material of the outer sheath 1 is thermoplastic polyvinyl chloride PVC, polyethylene, a halogen-free flame retardant material or chloroprene rubber.

The foregoing descriptions are merely preferable embodiments of the present invention, and the protection scope of the present invention is not limited thereto. All equivalent structural or process changes made according to the content of this
20 specification and accompanying drawings in the present invention or by directly or indirectly applying the present invention in other relevant technical fields shall fall within the protection scope of the present invention.

CLAIMS

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1. A cable with cable partitioning components, characterized by comprising an outer sheath (1) and a plurality of spaced partitioning rings (3), wherein in each partitioning ring (3), a partitioning board is disposed, the partitioning board comprises a center ring (4) and a plurality of support plates (5), the support plates (5) are uniformly distributed around the axis of the center ring (4), a center hole (6) is formed in the center ring (4), and two ends of each support plate (5) are respectively fixed on the outer wall of the center ring (4) and the inner wall of the partitioning ring (3); and the outer sheath (1) covers the partitioning ring (3).

2. The cable with cable partitioning components according to claim 1, characterized in that a plurality of bulges (7) are uniformly distributed on the outer wall of each partitioning ring (3).

3. The cable with cable partitioning components according to claim 1 or 2, characterized in that the inner wall of the outer sheath (1) is provided with a plurality of raised lines (2), and the raised lines (2) are arranged at intervals and are uniformly distributed around the axis of the outer sheath (1).

4. The cable with cable partitioning components according to claim 1, characterized in that the material of the outer sheath (1) is thermoplastic polyvinyl chloride PVC, polyethylene, a halogen-free flame retardant material or chloroprene rubber.

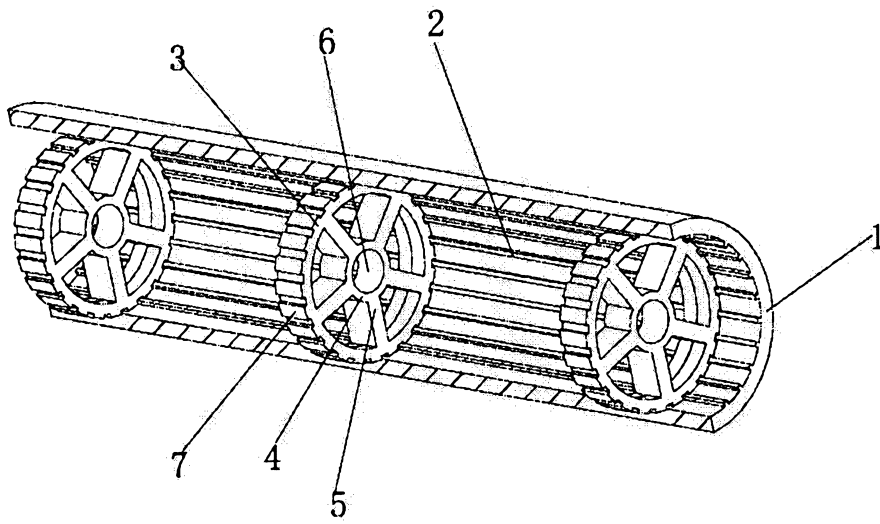


FIG. 1

ABSTRACT

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CABLE WITH CABLE PARTITIONING COMPONENTS

5 The present invention provides a cable with cable partitioning components. The
cable with cable partitioning components comprises an outer sheath (1) and a plurality
of spaced partitioning rings (3); in each partitioning ring (3), a partitioning board is
disposed, the partitioning board comprises a center ring (4) and a plurality of support
plates (5), the support plates (5) are uniformly distributed around the axis of the center
10 ring (4), a center hole (6) is formed in the center ring (4), and two ends of each support
plate (5) are respectively fixed on the outer wall of the center ring (4) and the inner
wall of the partitioning ring (3); and the outer sheath (1) covers the partitioning rings
(3). The cable with cable partitioning components, provided by the present invention,
has the beneficial effects that cable harnesses in the cable are effectively partitioned
15 with each other, and the fact that the cable harnesses are not mixed can be ensured
even if cable tapes are not completely wound around the cable harnesses.

Fig. 1