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Title: Device for guiding electromagnetic waves in terahertz range used in terahertz imaging system, is provided with confinement structure which extends continuously along length wire

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Abstract: NOVELTY - The device has a wire (100) which is provided with a core structure (10) and confinement structure (21,22). The confinement structure extends continuously along length the wire. The confinement structure includes groove and rib. The core structure is circular cross-section in shape. The confinement structure is triangular or rectangular cross-section. The dimension confinement structure is sub-wavelength dimension.

USE - Device for guiding electromagnetic waves in terahertz range used in terahertz imaging system (claimed) for endoscopic application.

ADVANTAGE - The confinement structure guiding system extends continuously along length the wire, so that the losses occurred in the guiding device can be reduced. The cost guiding device can be reduced. The production effort device can be improved. The propagation lengths device can be increased. The contamination the wire device can be avoided.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) system for terahertz imaging; and
- (2) method for guiding electromagnetic waves in terahertz range.

DESCRIPTION DRAWING(S) - The drawings show the sectional views the wires.

Core structure (10)

Confinement structure (21,22)

Wire (100)

Drawing:

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