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Patent Number(s): CN202267757-U

Title: Terahertz band optical element wire grid polarizer for use in e.g. light processing device, has resin film formed of resin base material, metal wire set on resin film, and concave-convex structure formed on surface of resin film

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Abstract: NOVELTY - The polarizer has a resin film formed of resin base material. A metal wire is formed on the resin film. A regular concave-convex structure is formed on a surface of the resin film, where thickness of the resin film is 0.01-3 micro meter and bandwidth of the resin film is 0.5-1.5 terahertz. The metal wire is covered by a protective film, where height of the concave-convex structure is 0.01-20 micro meter. Spacing distance of the concave-convex structure is 0.01-20 micro meter.

USE - Terahertz band optical element wire grid polarizer for use in terahertz time domain spectral analyzer, a light penetration rate based checking device, a light processing device, a subject information acquisition device and an information communication device (all claimed).

ADVANTAGE - The polarizer has low manufacturing cost and high optical performance. The polarizer is convenient to use and store and prevented from being damaged.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a terahertz time domain spectral analyzer

(2) a light penetration rate based checking device

(3) a light processing device

(4) a subject information acquisition device

(5) an information communication device.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a terahertz band optical element wire grid polarizer.

Derwent Class Code(s): A89 (Photographic, laboratory equipment, optical); P81 (Optics); S03 (Scientific Instrumentation, photometry, calorimetry); V07 (Fibre-optics and Light Control) Derwent Manual Code(s): A11-C02B; A12-L03; A12-L04B; S03-E04B5; V07-F02B; V07-K03 IPC: G01N-021/17; G01N-021/41; G02B-005/30