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Title: Integrated antenna device module for generating terahertz continuous wave comprises photoconductor thin film pattern formed on front surface substrate, metal electrode, and focusing meta-material lens

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Abstract: NOVELTY - An integrated antenna device module comprises a photoconductor thin film pattern formed on the front surface a substrate (1) to generate terahertz continuous wave, a metal electrode (12) formed on the photoconductor thin film pattern to apply direct current (DC) bias voltage to the photoconductor thin film pattern, and a focusing meta-material lens (13) formed on the rear surface the substrate to focus the terahertz continuous wave radiated from the photoconductor thin film pattern.

USE - An integrated antenna device module for generating terahertz continuous wave (claimed).

ADVANTAGE - Manufacturing process is simplified, therefore saving time and costs, errors during manufacturing process are minimized, performance and reliability the photoconductive antenna are improved, and resolution limitation the optical lens can be overcome.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method manufacturing an integrated antenna device module for generating terahertz continuous wave.

DESCRIPTION DRAWING(S) - The drawings show schematic diagrams illustrating a method fabricating a photoconductive antenna an integrated antenna device module for generating terahertz continuous wave.

Substrate (1)

Photoconductor thin film (11a)

Metal electrode (12)

Meta-material lens (13)

1st nitride film (13b)

Drawing:

Derwent Class Code(s): L03 (Electro-(in)organic, chemical features electrical devices); W02 (Broadcasting, Radio and Line Transmission Systems)

Derwent Manual Code(s): L03-H03; L04-C06; L04-C11C; L04-E03; W02-B08L

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