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Patent Number(s): CN102376812-A

Title: Tellurium-cadmium-mercury terahertz detector has electrode layer that is sputtered on graphite substrate by magnetron sputtering cadmium substrate layer

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Abstract: NOVELTY - The detector has cadmium substrate layer (1) that is grow on tellurium-cadmium mercury layer. The thickness cadmium substrate layer is set smaller than 1.5 mm and the thickness tellurium-cadmium-mercury layer is set to 3-12 mm. The electrode layer (5) is coupled to antenna made gold sputtering. The zinc sulfide layer (4) and tellurium-cadmium mercury layer are covered. The electrode layer is sputtered on graphite substrate by magnetron sputtering cadmium substrate layer.

USE - Tellurium-cadmium-mercury terahertz detector.

ADVANTAGE - The detector is featured with high detection sensitivity, fast response speed, compact structure and large scale integration. The image for terahertz signal can be detected in real time.

DESCRIPTION DRAWING(S) - The drawing shows a sectional view the tellurium-cadmium-mercury terahertz detector. (Drawing includes non-English language text)

Cadmium substrate layer (1)

Cadmium-telluride layer (3)

Zinc sulfide layer (4)

Electrode layer (5)

Derwent Class Code(s): L03 (Electro-(in)organic, chemical features electrical devices); U11 (Semiconductor Materials and Processes); W02 (Broadcasting, Radio and Line Transmission Systems)

Derwent Manual Code(s): L03-H02; L03-H03; L03-H04D; L03-X; L04-A03A; L04-C01D; L04-C10E; L04-C11C; U11-C01A3; U11-C05C2; W02-B07; W02-B08D; W02-B10; W02-B12

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