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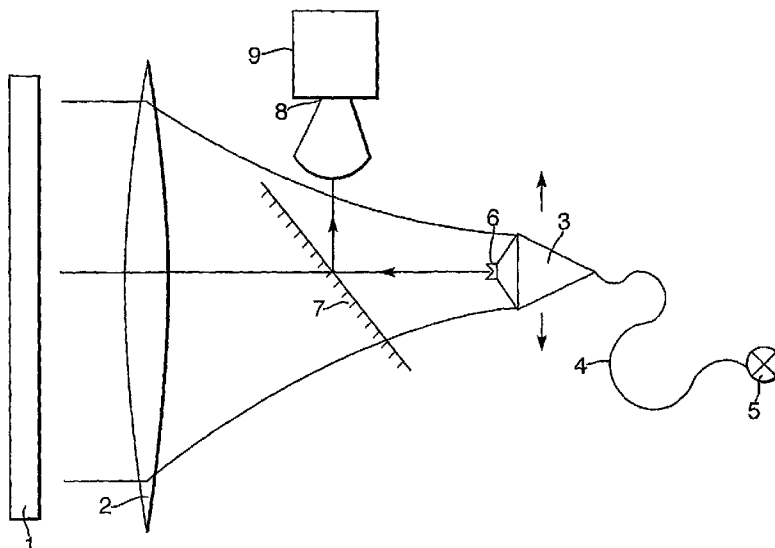
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(54) Title: MILLIMETRE AND SUB-MILLIMETRE IMAGING DEVICE



(57) Abstract: The terahertz camera has a fixed objective lens (2) and a plurality of detectors (3) positioned at the focal plane of the objective lens (2). Each of the detectors (3) is mounted on a movable support (10) so that the antenna is capable of movement across the focal plane of the objective lens (2) and is provided with a flexible waveguide (4) for connecting the output of the detector (3) with signal processing means. Each detector (3) is also provided with a retroreflector (6) which is reflective at frequencies other than terahertz frequencies. During use of the camera, the retroreflector (6) of each detector (3) is illuminated at non-terahertz frequencies so that the spatial position of each detector (3) and hence the spatial source of signals generated by the detector can be accurately identified. The terahertz camera is particularly suited for use in security installations and in chemical and food processing industries.

WO 2005/026833 A3



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