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Patent Number(s): JP2012117966-A

Title: Detection organic substance e.g. carbohydrate using tetrahertz spectroscopy, involves suspending organic substance in medium, irradiating electromagnetic radiation, detecting reflected radiation, and identifying organic substance

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Derwent Primary Accession No.: 2012-H11982

Abstract: NOVELTY - An organic substance is suspended (104) in a medium to obtain (106) a sample. A beam electromagnetic radiation having a frequency range 100 GHz to THz is irradiated (110) and/or transmitted (112) with respect to the sample, and radiation reflected from the sample is detected. The detected radiation is analyzed (114) and the organic substance is identified (100). The medium is agar, guar gum, gellan gum, carrageenan, xanthan gum, fibrous sodium pectate, acrylamide, and/or other agar substitute, preferably agar.

USE - Detection organic substance e.g. carbohydrate, sucrose, lactulose, lactose, maltose, trehalose and cellobiose, using tetrahertz spectroscopy (all claimed).

ADVANTAGE - The method stabilizes the organic substance for effective tetrahertz spectroscopy. Agar is an effective medium for hardly contributing to reduction in signal.

DESCRIPTION DRAWING(S) - The drawing shows a process drawing the detection organic substance using tetrahertz spectroscopy. (Drawing includes non-English language text)

Detection method (100)

Suspension process (104)

Sample formation (106)

Irradiation process (110)

Transmission process (112)

Analysis radiation (114)

Drawing:

Derwent Class Code(s): A89 (Photographic, laboratory equipment, optical); S03 (Scientific Instrumentation, photometry, calorimetry)

Derwent Manual Code(s): A03-A00A; A12-E13; S03-E04A1; S03-E04A5

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