

Title (en)

DEVICE AND METHOD TO USE SINGLE WALLED CARBON NANOTUBE COMPOSITES FOR GAS SENSING APPLICATIONS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR VERWENDUNG VON EINWANDIGEN KOHLENSTOFFNANORÖHREN-KOMPOSITEN FÜR GASNACHWEIS

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR UTILISER DES COMPOSITES À NANOTUBE DE CARBONE MONOPAROIS POUR DES APPLICATIONS DE DÉTECTION DE GAZ

Publication

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Application

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Abstract (en)

[origin: WO2009104202A1] The invention relates to a sensor and method of using a sensor for detecting a gas or a liquid comprising a sensitive composite film formed with selective metal nanoparticles and single walled carbon nanotubes (SWNT) having an alterable optical and electrical characteristics. When the composite film is irradiated with white light or laser, it produces a first visible fluorescence which is sensitive and adapted to absorb the particular gas or the liquid when exposed and produces a variation in its own fluorescence which is different from the first fluorescence and this alterable fluorescence intensity is indicative of the quantity of the gas or the liquid present.

IPC 8 full level

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