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(54) **Title:** VARIOUS USES OF THE NANOPARTICULATE COMPOUND OF TITANIUM DIOXIDE FUNCTIONALIZED

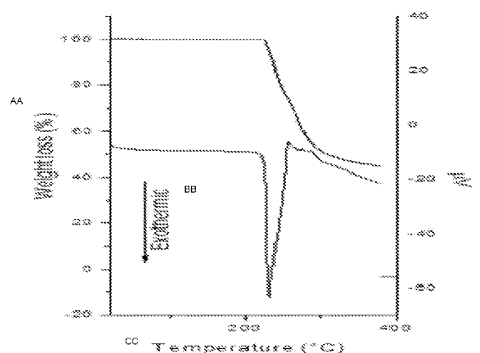


Figure 4

(57) **Abstract:** The present invention refers to various uses of the compound of titanium dioxide modified with organic functional groups, inorganic radicals and herbal and/or fruit extracts adsorbed on its surface and pores, wherein said compound is used as: water disinfectant or purifier agent; biopesticide and post-harvest; preservative in preparation of industrialized hygienic, cosmetic and food products; inductor or activator of tissue regeneration; in the pharmaceutical industry by administering it through different systemic pathways, being effective on treatment and prevention of infection processes caused by viruses, bacteria, fungi, spores, mycobacteria and parasites; microbial agent, mixed with water; antineoplastic for battling pathogenic microorganisms; microbial agent in the livestock, cattle and aquaculture industries.

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