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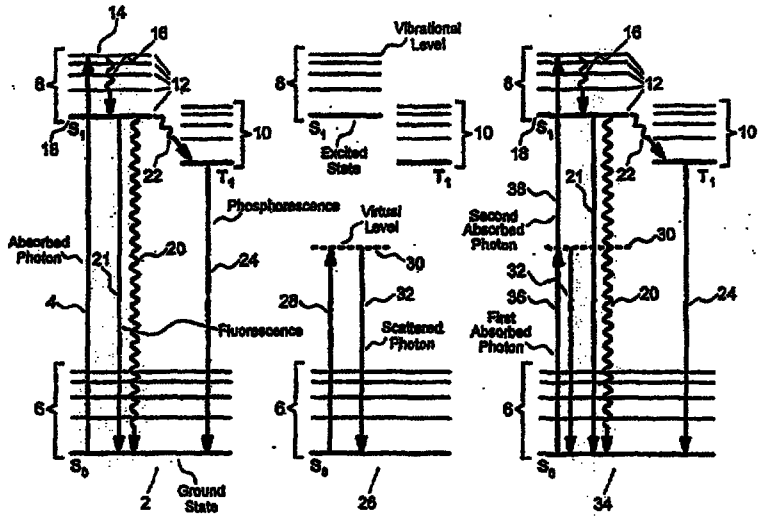
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(54) Title: METHOD FOR IMPROVED SELECTIVITY IN PHOTO-ACTIVATION AND DETECTION OF MOLECULAR DIAGNOSTIC AGENTS



(57) Abstract

A method for the imaging of a particular volume of plant or animal tissue, wherein the plant or animal tissue contains at least one photo-active molecular agent. The method comprises the steps of treating the particular volume of the plant or animal tissue with light sufficient to promote a simultaneous two-photon excitation of the photo-active molecular agent contained in the particular volume of the plant or animal tissue, photo-activating at least one of the photo-active molecular agents in the particular volume of the plant or animal tissue, thereby producing at least one photo-activated molecular agent, wherein the at least one photo-activated molecular agent emits energy, detecting the energy emitted by the at least one photo-activated molecular agent, and producing a detected energy signal which is characteristic of the particular volume of plant or animal tissue. The present invention also provides a method for the imaging of a particular volume of material, wherein the material contains at least one photo-active molecular agent.