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(71) Applicants: **AUBURN UNIVERSITY** [US/US]; 570 Devall Drive, Suite 102, Auburn, Alabama 36832 (US). **THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE**

[US/US]; 1400 Independence Avenue S.W., Washington, District of Columbia 20250 (US).

(72) Inventors: **CHIN, Bryan A.**; 610 Jennifer Drive, Auburn, Alabama 36830 (US). **TORBERT, III, Henry Allen**; 1105 E. Collinwood Circle, Opelika, Alabama 36801 (US). **YAKUBOVA, Galina N.**; 4315 Golf Club Dr., apt. 2511, Auburn, Alabama 36830 (US). **KAVETSKIY, Aleksandr**; 4315 Golf Club Dr., apt. 2511, Auburn, Alabama 36830 (US). **SARGSYAN, Nikolay**; 1114 South College Street, Apt. 2-301, Auburn, Alabama 36832 (US).

(74) Agent: **WILLIAMS, Eric E.**; BARNES & THORNBURG LLP, 11 South Meridian Street, Indianapolis, Indiana 46204 (US).

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(54) Title: SCANNING MODE APPLICATION OF NEUTRON GAMMA ANALYSIS FOR SOIL CARBON MAPPING

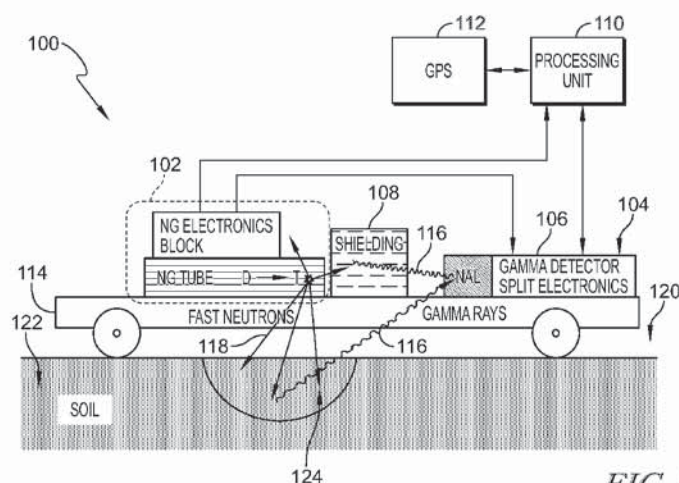


FIG. 1

(57) Abstract: A system for analyzing soil content of a field includes a data acquisition unit configured to detect gamma spectra of each of a plurality of soil samples, wherein a surface area of the field is divided into a plurality of portions and the plurality of soil samples comprises at least one soil sample from each of the plurality of portions, a navigation unit configured to detect geographic coordinates of each of the plurality of soil samples, a data analysis unit configured to associate the detected gamma spectra of each of the plurality of soil samples with the geographic coordinates of the soil sample and determine a weight percent of at least one element within each of the soil samples based on the detected gamma spectra, and an element content map unit configured to generate a map indicating concentration of the at least one element within the soil of the field.

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
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