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(54) **AUTOMATED SOIL GAS MONITORING CHAMBER**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.**⁷ **G01N 33/18**; G01N 1/10; E21B 47/00; E21B 11/02

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(52) **U.S. Cl.** **73/19.1**; 73/864.74; 166/264; 175/20

(57) **ABSTRACT**

(58) **Field of Search** 73/19.1, 19.01, 73/152.25, 152.28, 864.52, 864.74; 166/264; 175/20

A chamber for trapping soil gases as they evolve from the soil without disturbance to the soil and to the natural microclimate within the chamber has been invented. The chamber opens between measurements and therefore does not alter the metabolic processes that influence soil gas efflux rates. A multiple chamber system provides for repetitive multi-point sampling, undisturbed metabolic soil processes between sampling, and an essentially airtight sampling chamber operating at ambient pressure.

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20 Claims, 3 Drawing Sheets

