SYSTEM OF EXTRACTION OF VOLATILES FROM SOIL USING MICROWAVE PROCESSES

Inventors: Edwin C. Ethridge, Huntsville, AL (US); William F. Kaukler, Huntsville, AL (US)

Assignee: The United States of America as represented by the Administrator of the National Aeronautics and Space Administration, Washington, DC (US)

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Abstract
A device for the extraction and collection of volatiles from soil or planetary regolith. The device utilizes core drilled holes to gain access to underlying volatiles below the surface. Microwave energy beamed into the holes penetrates through the soil or regolith to heat it, and thereby produces vapor by sublimation. The device confines and transports volatiles to a cold trap for collection.

19 Claims, 3 Drawing Sheets