

HONORS

R&D 100 Award, naming the Gas Phase Corona Reactor as “one of the 100 most technologically significant advances” of 1993.

R&D 100 Award, naming Six-Phase Soil Heating as “one of the 100 most technologically significant advances” of 1995.

SELECTED ERH PATENTS

The following patents for ERH are generally referred to as the “Heath-Battelle Patents”:

Heath, W.O., P.A. Gauglitz, G. Pillay, T.M. Bergsman, E.A. Eschbach, S.C. Goheen, R.L. Richardson, J.S. Roberts, and R. Schalla. 1996. Heating of Solid Earthen Material, Measuring Moisture and Resistivity. United States Patent 5,545,803.

Heath, W.O., R.L. Richardson, and S.C. Goheen. 1994. Method and Apparatus for Solid Earthen Material. United States Patent 5,999,231.

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P.A. Gauglitz, J.S. Roberts, T.M. Bergsman, S.M. Caley, W.O. Heath, M.C. Miller, R.W. Moss, R. Schalla, M.H. Schlender, T.R. Jarosch, C.A. Eddy-Dilek, and B.B. Looney. 1994. Six-Phase Soil Heating for Enhanced Removal of Contaminants: Volatile Organic Compounds in Non-Arid Soils Integrated Demonstration, Savannah River Site. PNL-10184. Pacific Northwest Laboratory, Richland, Washington.

Gauglitz, P.A., J.S. Roberts, T.M. Bergsman, S.M. Caley, W.O. Heath, M.C. Miller, R.W. Moss, R. Schalla, T.R. Jarosch, and C.A. Eddy-Dilek. 1994. Six-Phase Soil Heating Accelerates VOC Extraction from Clay Soil. PNL SA-24002. Presented at International Nuclear and Hazardous Waste Management Conference, August 14-18, Atlanta, Georgia.

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Bergsman, T.M., J.S. Roberts, D.L. Lessor, and W.O. Heath. 1993. Field Test of Six-Phase Soil Heating and Evaluation of Engineering Design Code. PNL-SA-21537. Presented at Waste Management '93, February 28-March 4, Tucson, Arizona.

Heath, W.O. 1993. ERACE (Electrical Remediation at Contaminated Environments). Presented at Environmental Restoration Technical Interchange Symposium, March 16-19, Salt Lake City, Utah.

Heath, W.O. 1993. "In Situ Heating to Destroy and Remove Organics from Soils" in Smith, L.A. And R.E. Hincsee, In Situ Thermal Technologies for Site Remediation, CRC Press, Boca Raton, Florida.

Bergsman, T.M., J.S. Roberts, W.O. Heath, and D.L. Lessor. 1993. Six-Phase Heating to Enhance Removal of Contaminants. Presented at Second Semi-Annual OTD Information Meeting, Houston, TX.

Heath, W.O., S.C. Goheen, M.C. Miller, and R.L. Richardson. 1992. "Investigation of Electric Fields For Low-Temperature Treatment of Soils and Liquids", Proceedings of the 1992 U.S. EPA/A&WMA International Symposium on In Situ Treatment of Contaminated Soil and Water, VIP-24. Air & Waste Management Association, Pittsburgh, Pennsylvania.

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