Title (en)

ENGINEERED CEMENTITIOUS CONTAMINANT BARRIERS AND THEIR METHODS OF MANUFACTURE.

Title (de)

VORBEARBEITETE ZEMENTVERUNREINIGUNGSSPERREN UND VERFAHREN ZU IHRER HERSTELLUNG.

Title (fr)

BARRIERES CIMENTAIRES PERFECTIONNEES ISOLANT DES SUBSTANCES CONTAMINANTES ET LEURS PROCEDES DE FABRICATION.

Publication

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Application

EP 91917485 A 19910719

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Abstract (en)

[origin: WO9202024A1] Novel engineered cementitious contaminant barriers and containers for storage of hazardous waste are formed by positioning a hydraulic cement composition into a predetermined configuration and then hydrating the cement composition. One or more liquid, ion, or gas getters capable of binding with or absorbing liquids, ions, or gases which may penetrate the barrier may be positioned into the configuration before hydrating. The contaminant barriers of the present invention may be engineered to include mixtures of different getters, single and multiple layers of different getters, multiple layers of cement and getters, and a host of different getter, cement, mixture, and layer combinations. Novel waste containers are also advantageously prepared utilizing contaminant barriers within the scope of the present invention. The waste containers may be prepared by surrounding waste material with at least one getter and with a powdered hydraulic cement composition and then compressing the cement and getter around the waste material. Preformed waste containers may also be prepared within the scope of the present invention. Use of reinforcing fibers and aggregates to improve the mechanical properties of the hazardous waste container is disclosed.

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IPC 8 full level

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