

Title (en)

METHOD FOR PROCESSING SOLID RADIOACTIVE WASTE

Title (de)

VERFAHREN ZUM AUFARBEITEN FESTER RADIOAKTIVER ABFÄLLE

Title (fr)

PROCÉDÉ DE TRANSFORMATION DE DÉCHETS RADIOACTIFS SOLIDES

Publication

**EP 2797082 B1 20161026 (EN)**

Application

**EP 12860442 A 20121217**

Priority

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- RU 2012001075 W 20121217

Abstract (en)

[origin: EP2797082A1] The invention relates to the field of environmental protection and to the field of processing solid waste contaminated with radionuclides. The method for processing solid radioactive waste involves preheating the waste to be processed in a heater using heat from melting chamber exhaust gases at a temperature of 1600-1750°C, loading the waste into a melting chamber via an opening in the sidewall of the chamber using a hermetic device at a speed of 0.8-1.1 tonnes per hour per 1m<sup>2</sup> of the surface of the liquid melt, continuously melting the waste in an oxy-fuel skull melting chamber, the exhaust gases from which are fed into the heater, maintaining a constant level of liquid metal in the lined metal bath of the chamber during processing, draining the "dirty" radioactive slag from the melting chamber in the melting section once a layer of slag having a height of 250-400 mm has accumulated on the surface of the metal melt, and carrying out the pouring of the metal obtained in the melting chamber in a section that is separated from the melting section by a solid partition. The invention makes it possible to increase the productivity of the method and reduce the evaporation of volatile radionuclides.

IPC 8 full level

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CPC (source: EP)

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Cited by

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