

Title (en)

STABILISATION TREATMENT, IN PARTICULAR FOR WASTE INCINERATION RESIDUES

Title (de)

STABILISIERUNGSBEHANDLUNG, INSbesondere FÜR ABFALLVERBRENNUNGSRÜCKSTÄNDE

Title (fr)

TRAITEMENT DE STABILISATION NOTAMMENT DE RESIDUS RESULTANT DE L'INCINERATION DE DECHETS

Publication

EP 1404465 A1 20040407 (FR)

Application

EP 02787142 A 20020703

Priority

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- FR 0109058 A 20010709
- FR 0200950 A 20020128

Abstract (en)

[origin: FR2826887A1] The treatment of special industrial wastes containing salts and heavy metals such as incineration products and especially residues from the cleaning of fumes from the incineration of domestic waste comprises lixiviation by a washing solution followed or preceded by cementation with polysulfides, followed by separation of the solid and liquid fractions and precipitation of salts in the liquid fraction, followed by a further separation. The lixiviation stage, conducted at a slightly raised temperature (warm), places soluble species in solution and lowers the pH. After extraction of solid matter, the liquid fraction is subjected to cementation with polysulfides to precipitate heavy metals as sulfides. The solid fraction is preferably also separately treated with polysulfides. After a further separation of solid matter, the liquid fraction is subjected to saline precipitation with hydraulic binders to precipitate the salts contained within it. The water from this stage is reused for a new treatment cycle. The solid fractions from the lixiviation and saline precipitation stages are united to obtain a clinker which has an economic value. An Independent claim is included for an apparatus for the above process, comprising successively a lixiviation-sulfuration stage consisting of a sulfuration cementation unit, a lixiviation unit and a solid/liquid separation unit not necessarily in that order and saline precipitation stage with a liquid/solid separator at its outlet.

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