

Title (en)

Process for the reductive dehalogenation of solid and liquid materials containing organohalogens.

Title (de)

Verfahren zur reduktiven Dehalogenierung von organohalogenhaltigen festen und flüssigen Stoffen.

Title (fr)

Procédé pour la déshalogénéation réductive des matériaux solides et liquides contenant des composés organiques halogénés.

Publication

EP 0635283 A1 19950125 (DE)

Application

EP 94250184 A 19940720

Priority

DE 4324931 A 19930724

Abstract (en)

The invention relates to a process for the reductive dehalogenation of halogenated hydrocarbons contained in mixtures of solid or liquid substances by treating these substances with sodium in liquid ammonia. According to the invention, halogenated hydrocarbons can be destroyed in this manner rapidly and completely without preceding extraction even if they are present in the sorbed state on solid matrices, such as activated charcoal, ash, river sediments, soils and the like.

Abstract (de)

Die Erfindung betrifft ein Verfahren zur reduktiven Dehalogenierung von Halogenkohlenwasserstoffen, die in Gemischen von festen oder flüssigen Stoffen enthalten sind, durch Behandeln dieser Stoffe mit Natrium in flüssigem Ammoniak. Erfindungsgemäß können auf diese Weise Halogenkohlenwasserstoffe ohne vorhergehende Extraktion schnell und vollständig zerstört werden, auch wenn sie im sorbierten Zustand an festen Matrices, wie Aktivkohle, Aschen, Flußsedimenten, Böden u. ä. vorliegen.

IPC 1-7

A62D 3/00

IPC 8 full level

A62D 3/34 (2007.01); **A62D 3/37** (2007.01); **A62D 101/22** (2007.01)

CPC (source: EP)

A62D 3/34 (2013.01); **A62D 3/37** (2013.01); **A62D 2101/22** (2013.01); **A62D 2203/04** (2013.01)

Citation (search report)

- [X] EP 0288408 A1 19881026 - SANDPIPER A L CORP [US]
- [X] US 4910353 A 19900320 - SIEGMAN JOHN R [US]
- [DA] GB 2017143 A 19791003 - DEGUSSA
- [X] CHEMICAL ABSTRACTS, vol. 76, no. 13, 27 March 1972, Columbus, Ohio, US; abstract no. 69170s, M.V.KENNEDY ET AL: "Chemical and Thermal Aspects of Pesticide Disposal" page 115; column 2;
- [X] J.DE LANNOY ET AL: "Sodium-Ammonia Reductions in N-Heteroaromatic Chemistry.", BULLETIN DES SOCIETES CHIMIQUES BELGES, vol. 79, 1970, OXFORD GB, pages 329 - 336
- [X] CHEMICAL ABSTRACTS, vol. 83, no. 14, 6 October 1975, Columbus, Ohio, US; abstract no. 125874h, E.S.LAHANIATAS ET AL: "Ecological chemistry. XCIV. Analysis and photochemistry of high-boiling polychlorinated paraffin mixtures" page 805; column 1;

Cited by

US5998691A; EP0880378A4

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0635283 A1 19950125; EP 0635283 B1 19990120; AT E175882 T1 19990215; DE 4324931 A1 19950126; DE 59407681 D1 19990304

DOCDB simple family (application)

EP 94250184 A 19940720; AT 94250184 T 19940720; DE 4324931 A 19930724; DE 59407681 T 19940720