

Title (en)
METHOD FOR PRODUCING PHOSPHORYL OR THIOPHOSPHORYL TRIAMIDE, AND USE OF COMPOUND IN NITROGEN FERTILIZER FORMULATIONS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON PHOSPHORYL ODER THIOPHOSPHORYL TRIAMID UND VERWENDUNG EINER VERBINDUNG IN STICKSTOFFDÜNGEMITTELFORMULIERUNGEN

Title (fr)
PROCEDE DE FABRICATION DE TRIAMIDE DE PHOSPHORYLE OU DE THIOPHOSPHORYLE, ET UTILISATION DE COMPOSE DANS DES FORMULATIONS D'ENGRAIS AZOTIQUES

Publication
EP 4330263 A1 20240306 (FR)

Application
EP 22720512 A 20220427

Priority
• FR 2104347 A 20210427
• IB 2022053887 W 20220427

Abstract (en)
[origin: CA3214284A1] Disclosed is a method for producing phosphoryl triamide OP(NH₂)₃ or thiophosphoryl triamide SP(NH₂)₃, wherein a) phosphoryl trichloride OPCl₃ or thiophosphoryl trichloride SPCl₃, respectively, is reacted with gaseous ammonia in an apolar liquid phase to give a first precipitate comprising, respectively, phosphoryl triamide or thiophosphoryl triamide, and ammonium chloride, b) said first precipitate is treated with sodium carbonate or potassium carbonate, preferably with sodium carbonate, in a polar organic liquid phase, to give a second precipitate comprising NaCl and the remaining phosphoryl triamide or thiophosphoryl triamide in said polar organic liquid phase, and said second precipitate is separated from said polar organic liquid phase, said phase optionally being further subjected to a concentration step to enrich it in phosphoryl triamide or thiophosphoryl triamide.

IPC 8 full level
C07F 9/06 (2006.01); **C01B 21/097** (2006.01); **C05G 3/90** (2020.01)

CPC (source: EP IL)
C01B 21/097 (2013.01 - EP IL); **C05G 3/90** (2020.02 - EP IL); **C07F 9/065** (2013.01 - EP IL)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
FR 3122179 A1 20221028; AR 125464 A1 20230719; AU 2022266247 A1 20231102; BR 112023022495 A2 20240116; CA 3214284 A1 20221103; EP 4330263 A1 20240306; IL 307736 A 20231201; WO 2022229859 A1 20221103

DOCDB simple family (application)
FR 2104347 A 20210427; AR P220101099 A 20220427; AU 2022266247 A 20220427; BR 112023022495 A 20220427; CA 3214284 A 20220427; EP 22720512 A 20220427; IB 2022053887 W 20220427; IL 30773623 A 20231015