

Title (en)

METHOD FOR PRODUCING FERTILIZER GRANULATES CONTAINING UREA AND AMMONIUM SULFATE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON HARNSTOFF UND AMMONSULFAT ENTHALTENDEN DÜNGEMITTEL-GRANULATEN

Title (fr)

PROCEDE DE PREPARATION D'ENGRAIS SOUS FORME DE GRANULES CONTENANT DE L'UREE ET DU SULFATE D'AMMONIUM

Publication

EP 1094997 A1 20010502 (DE)

Application

EP 99931067 A 19990614

Priority

- DE 19826570 A 19980615
- EP 9904094 W 19990614

Abstract (en)

[origin: DE19826570A1] The invention relates to a method for producing fertilizer granulates which contain urea and ammonium sulfate and which have an ammonium sulfate concentration </=60 wt.%. According to the invention, a) a melted material suspension which is comprised of ammonium sulfate having an average particle size ranging from 30 to 300 mu m and urea is produced at a temperature ranging from 120 to 155 DEG C; b) afterwards, the melted material suspension formed in step a) is diffused from underneath in a fluidized bed granulator with the aid of at least one nozzle into fine ammonium sulfate urea particles, whereby the fluidized bed is loosened by an ebullating air stream in the area of the injection point, and afterwards; c) the fertilizer granulate formed in the fluidized bed is detached and optionally processed. The method permits the production of homogeneous urea ammonium sulfate granulates having an ammonium sulfate content ranging from 30 to 60 wt.% in a trouble-free manner, whereby the core size of the granulate can be adjusted in a targeted manner and the emission of dust during granulation can be minimized.

IPC 1-7

C05C 3/00; C05C 9/00; C05C 13/00; C05G 5/00; B01J 2/16

IPC 8 full level

B01J 2/04 (2006.01); **C05C 3/00** (2006.01); **C05C 9/00** (2006.01); **C05C 13/00** (2006.01); **C05G 5/00** (2006.01)

CPC (source: EP US)

C05C 3/00 (2013.01 - EP US)

Citation (search report)

See references of WO 9965845A1

Designated contracting state (EPC)

AT BE DE DK ES FI FR GB GR IE IT NL PT SE

DOCDB simple family (publication)

DE 19826570 A1 19991223; DE 19826570 C2 20021031; BG 105040 A 20010731; CZ 20004733 A3 20020116; EE 200000753 A 20020415; EP 1094997 A1 20010502; JP 2000044371 A 20000215; JP 4459326 B2 20100428; NO 20006283 D0 20001211; NO 20006283 L 20010212; PL 344857 A1 20011119; US 6179893 B1 20010130; WO 9965845 A1 19991223

DOCDB simple family (application)

DE 19826570 A 19980615; BG 10504000 A 20001211; CZ 20004733 A 19990614; EE P200000753 A 19990614; EP 9904094 W 19990614; EP 99931067 A 19990614; JP 16748799 A 19990614; NO 20006283 A 20001211; PL 34485799 A 19990614; US 33047399 A 19990611