

Search history

Search 1: SFT=((phosphat*) and (phosphoric (rock# or mineral#)) and fertiliser* and (furnace)) and PD<20171117 (Results 129)

1) Family number: 18847008 (GB437445A)

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Title: Improved process for making fused material from substances comprising domestic and industrial refuse

Abstract: 12589. [Class 111] [See also Groups XII and V] Refuse is supplied to a rotary drum furnace in successive batches and burnt batch by batch with a supply of heated air until the furnace contains a sufficient charge of residues of combustion which are then fused by coal, oil or gas firing and tapped from the furnace in liquid form. The liquid slag may be run into moulds to form paving blocks or may be broken up after cooling to form rubble or may be granulated. Phosphates, lime and potassium salts may be added to the refuse before, during or after treatment in the furnace so as to render it suitable as a fertilizer. The refuse is charged into the furnace at d and tapped off at d' <1>. The furnace gases pass through a duct o to a recuperator or regenerator k to heat air for combustion which is supplied through a pipe l to the burner i. When gas is employed it may also be preheated.

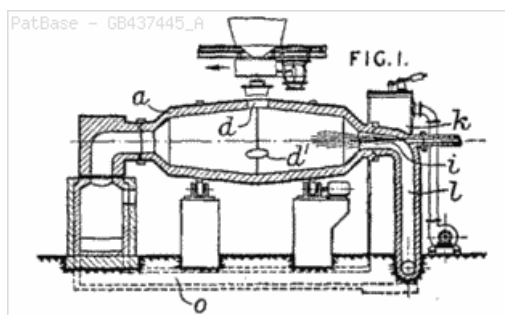
Classifications:

International (IPC 8-9): F23G5/20 (Advanced/Invention);
F23G5/20 (Core/Invention)

International (IPC 1-7): C04B35/60 F23G5/06

CPC: F23G5/20 F23G2202/20 F23G2203/206

European: F23G5/20

**Family:**

Publication number	Publication date	Application number	Application date
GB437445 A	19351028	GB19340012589	19340426

Priority:

GB19340012589 19340426

Probable Assignee: GUTEHOFFNUNGSHUETTE OBERHAUSEN**Assignee(s):** (std): GUTEHOFFNUNGSHUETTE OBERHAUSEN

Assignee(s): GUTEHOFFNUNGSHUETTE OBERHAUSEN AG ; GUTEHOFFNUNGSHUETTE OBERHAUSEN
AKTIENGESellschaft

2) Family number: 20867017 (GB910924A)

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Title: Improvements in and relating to the production of orthophosphates of calcium

Abstract: Orthophosphates of calcium are obtained by hydrolyzing condensed calcium phosphates containing 2 to 15% by weight of silica and wherein the phosphorus to calcium ratio expressed as $P_2O_5:CaO$ is in a molar ratio of 0,96-1,2, the silica to calcium ratio expressed as SiO_2-CaO is in a molar ratio of 0,27-0,53, and/or the silica to phosphorus ratio expressed as $SiO_2:P_2O_5$ is in a molar ratio of 0,1-0,7. The condensed calcium phosphates are obtained by reacting rock phosphate and apatite concentrates at 1,000 to 1,200 DEG C with phosphorus pentoxide; sand, quartz, phosphate ore, limestone and/or lime are added to obtain the above proportions of silica, calcium phosphorus. The hydrolysis to mono-calcium and orthophosphate is carried out by contacting the condensed calcium phosphates with water at 90 DEG to 100 DEG C. The monocalcium orthophosphate may be mixed with lime to obtain di-calcium phosphate. The calcium orthophosphates may be ammoniated with anhydrous ammonia, ammonium hydroxide solution, ammonium nitrate and ammonia solutions, urea and ammonium hydroxide solutions or urea formaldehyde and ammonium hydroxide solutions.

Classifications:

International (IPC 8-9): C01B25/32 C01B25/38 (Advanced/Invention);
C01B25/00 (Core/Invention)

International (IPC 1-7): C01B25/32

CPC: C01B25/32 C01B25/385

European: C01B25/32 C01B25/38B

Family:

Publication number	Publication date	Application number	Application date
GB910924 A	19621121	GB19590012637	19590414

Priority:

GB19590012637 19590414

Probable Assignee: AFRICAN METALS CORP LTD

Assignee(s): (std): AFRICAN METALS CORP LTD
Inventor(s): (std): COETZEE JACOB JOHANNES ; SMIT NIMROD

3) Family number: 29659020 (GB651384A)

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Title: Process for the improvement of the citrate solubility of thomas slag

Abstract: The citrate-solubility of Thomas slag is improved by reaction thereof with sodium slag derived from the desulphurization of pig iron, which may be added whilst molten or in solid form to the liquid Thomas slag it at leaves the converter. Alternatively, the two slags, in the solid state, may be ground, mixed, and heated up to sintering, say 1000-1100 DEG C., in a rotary or fixed furnace with continuous or alternating operation.

Classifications:

International (IPC 8-9): C05B5/00 (Advanced/Invention);

C05B5/00 (Core/Invention)

International (IPC 1-7): C05B5/00 C21C5/36

CPC: C05B5/00

European: C05B5/00

Family:

Publication number	Publication date	Application number	Application date
GB651384 A	19510314	GB19480030927	19481129

Probable Assignee: A R B E D ACIERIES REUNIES DE

Assignee(s): (std): A R B E D ACIERIES REUNIES DE

Assignee(s): A R B E D ACIERIES REUNIES DE BURBACH EICH DUDELANGE SOC ANONYME ; A R B E D ACIERIES REUNIES DE BURBACH EICH DUDELANGE SOCIETE ANONYME

4) Family number: 1074020 (US3817766A)

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Title: HARDENING OF WATERGLASS SOLUTIONS USING PYROCARBONIC ACID ESTERS AND/OR CARBOXYLIC-CARBONIC ACID ESTER ANHYDRIDES

Abstract: ABSTRACT OF THE DISCLOSURE Preferred acidic materials are diethyl pyrocarbonate, benzoic acid-carbonic acid ethyl ester anhydride and (isophthalic acid-carbonic acid ethyl ester) dianhydride. The hardening time can be controlled from a slow set to much shorter periods. Various additives and posttreatments may also be involved.

Classifications:

International (IPC 8-9): C04B28/26 C04B35/16 C04B35/26 C04B38/00 C09D1/02 C09D5/00 (Advanced/Invention);

C04B28/00 C04B35/16 C04B35/26 C04B38/00 C09D1/00 C09D5/00 (Core/Invention)

International (IPC 1-7): C01B33/20 C01B33/32 C04B15/02 C04B19/04 C04B21/00 C04B25/00 C04B29/00 C04B35/16 C04B43/00 C07C53/02 C07C59/00 C07C69/00 C07D307/89 C08J C09D1/04 C09K3/28 D06M11/06 E04C2/10 E04F13/00 E04F15/18

CPC: C04B28/26

European: C04B28/26

US: 106/603 106/7.5

Family:

Publication number	Publication date	Application number	Application date
AU197248070 A1	19740426	AU19720048070	19721023
AU464373 B2	19750821	AU19720048070	19721023
BE790573 A	19730426		00000000
BE790573 A1	19730426	BE19720123496	19721026
CA975506 A1	19751007	CA19720154777	19721025
DD103219 C	19740112	DD19720166486	19721025
DE2153532 A1	19730503	DE19712153532	19711027
DE2157371 A1	19730524	DE19712157371	19711119
FR2159031 A5	19730615	FR19720038234	19721027
GB1410213 A	19751015	GB19720049569	19721027
IT966499 A	19740211	IT19720053587	19721025
JP48051919 A2	19730721	JP19720107293	19721027
SE375978 B	19750505	SE19720013827	19721026
SE375978 C	19750814	SE19720013827	19721026
US3817766 A	19740618	US19720298727	19721018

Priority:

DE19712153532 19711027 DE19712157371 19711119

Probable Assignee: BAYER AG

Assignee(s): (std): BAYER AG

Assignee(s): BAYER AG 5090 LEVERKUSEN ; BAYER AG DT ; BAYER AKTIENGESSELLSCHAFT ; FARBENFABRIKEN BAYER AG 5090 LEVERKUSEN ; VON BONIN WULF ; FARBENFABRIKEN BAYER 5090 LEVERKUSEN AG ; 5BAYER AG ; BAYER 5090 LEVERKUSEN AG ; BAYER A G ; BAYER A G A LEVERKUSEN ALLEMAGNE

Inventor(s): (std): VON BONIN W ; VON BONIN WULF ; BONIN WULF VON DR ; BONIN WULF VON ; BONIN W

Inventor(s): BONIN W DT ; WULF VON BONIN ; BONIN WULF VON DR 5090 LEVERKUSEN

5) Family number: 2809022 (DE3723095A1)

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Title: Composition for feeding (dressing) woody plants with alkaline earth metals

Abstract: The invention relates to a composition for feeding (dressing) woody plants with alkaline earth metals. It is the

object of the invention to provide a magnesium calcium fertiliser with both an instant and a slow-release effect and which is suitable for acidic sites and for woody plants in areas with ground level pollution which have suffered nutrient deficiency symptoms which are characteristic of soil acidification. This object is achieved according to the invention by mixing processed calcium carbonate minerals and magnesium carbonate minerals, preferably ultrafinely ground dolomite, with magnesium oxide, preferably calcined magnesia, in such a manner that the product contains at least 13.5 percent of magnesium and 18 percent of calcium, 2 to 5 percent absolute of the magnesium being in the form of magnesium oxide. The fertiliser can be conveyed pneumatically and can be applied using conventional application technology.

Classifications:

International (IPC 8-9): C05D11/00 C05D3/02 (Advanced/Invention);
C05D11/00 C05D3/00 (Core/Invention)

International (IPC 1-7): A01G23/00 A01G7/00 C05D11/00 C05D3/02 C05D5/00 C05D7/00 C05G C09K17/00

CPC: C05D3/02

European: C05D3/02

Family:

Publication number	Publication date	Application number	Application date
AT393678 B	19911125	AT19870000635	19870317
AT63587 A	19910515	AT19870000635	19870317
CH673277 A	19900228	CH19870002650	19870713
CS8701342 A1	19900411	CS19870001342	19870227
DD271424 A3	19890906	DD19860293376	19860804
DE3723095 A1	19880303	DE19873723095	19870713
DE3723095 C2	19920521	DE19873723095	19870713
PL265205 A1	19880526	PL19870265205	19870416

Priority:

DD19860293376 19860804

Probable Assignee: VER FUTTERMITTEL WERKE TAUCHA

Assignee(s): (std): FIEDLER HANS JOACHIM PROF DR ; FUTTERMITTEL WERKE TAUCHA VER ; FUTTERMITTELWERKE GMBH I A TAU ; FUTTERMITTELWERKE TAUCHA V VER ; HERING DIETER DR ; VER FUTTERMITTELWERKE TAUCHA V ; TAUCHA VER FUTTERMITTELWERKE ; UHLIG HORST ; LEUBE FRIEDER DR ; NEBE WOLFGANG DR ; NURBERGER CHRISTIAN ; VER FUTTERMITTEL WERKE TAUCHA

Assignee(s): LEUBE FRIEDER DR DD ; NEBE WOLFGANG DR DD ; VEB VEREINIGTE FUTTERMITTEL WERKE TAUCHA DD ; VEB VEREINIGTE FUTTERMITTELWERKETAUCHA ; NURBERGER CHRISTIAN DD ; UHLIG HORST DD ; HERING DIETER DR DD ; VEB VEREINIGTE FUTTERMITTELWERKE TAUCHA ; FUTTERMITTELWERKE GMBH I A TAUCHA O 7127 TAUCHA DE ; FIEDLER HANS JOACHIM PROF DR DD

Inventor(s): (std): FIEDLER HANS JOACHIM DR ; FIEDLER HANS JOACHIM PROF DR ; HERING DIETER DR ; LEUBE FRIEDER DR ; NEBE WOLFGANG DR ; NUERNBERGER CHRISTIAN ; NURBERGER CHRISTIAN ; UHLIG HORST ; NEBE WOLFGANG ; LEUBE FRIEDER ; HERING DIETER ; FIEDLER HANS JOACHIM

Inventor(s): UHLIG HORST DD ; UHLIG HORST O 7127 TAUCHA DE ; NURBERGER CHRISTIAN DD ; NUERNBERGER CHRISTIAN DD ; NEBE WOLFGANG DD ; LEUBE FRIEDER DD ; HERING DIETER DD ; FIEDLER HANS JOACHIM DD

6) Family number: 1227023 (US4190632A)

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Title: Process for treating air-borne (metallic) dusts containing silicon dioxide to form precipitated silicic acids and silicates

Abstract: There is provided a process for treating air-borne dust containing silicon dioxide in order to form a silicic acid or a silicate. The air-borne dust is dissolved in an alkali metal hydroxide solution to form an alkali metal silicate solution. The alkali metal silicate solution is purified by treating it with activated charcoal and/or oxidation agents. Non-decomposable substances remaining after the purification step are removed from the alkali metal silicate solution. The alkali metal silicate solution is then reacted with acids and/or salts of aluminum, magnesium and calcium. The resulting product is then filtered, washed and dried, and then comminuted to form a finely divided, amorphous, substantially pure, precipitated, silicic acid or silicate having a whiteness according to Berger at a wave length of 460 m mu of about 90 to about 95 percent and a specific surface area of about 30 to about 800 m²/g BET. The resulting products are useful as reinforcing fillers in the rubber and plastics industries, as well as additives in the paint, varnish, lacquer, paper, cosmetic, pharmaceutical, feed and pesticide industries.

Classifications:

International (IPC 8-9): C01B33/12 C01B33/193 C01B33/20 C01B33/22 C01B33/32 (Advanced/Invention);
C01B33/00 (Core/Invention)

International (IPC 1-7): C01B33/00 C01B33/12 C01B33/18 C01B33/193 C01B33/20 C01B33/26 C22B7/02 C22B7/02

CPC: C01B33/193 C01B33/22 C01B33/24 C01B33/26 C01B33/32 C01B33/325 C01B33/40 C01B33/42 C01B33/46

C01P2004/61 C01P2006/10 C01P2006/12 C01P2006/19 C01P2006/60 C01P2006/80 C01P2006/82 C01P2006/90

European: C01B33/193 C01B33/22 C01B33/24 C01B33/26 C01B33/32 C01B33/32B C01B33/40 C01B33/42 C01B33/46

M01P4/61 M01P6/10 M01P6/12 M01P6/19 M01P6/60 M01P6/80 M01P6/82 M01P6/90

US: 106/466 106/488 423/118 423/118.1 423/158 423/179 423/215.5 423/330.1 423/331 423/334 423/339

Family:

Publication number	Publication date	Application number	Application date
AR210790 A1	19770915	AR19770266789	19770309
AT157677 A	19800315	AT19770001576	19770309
AT359040 B	19801010	AT19770001576	19770309
BE852236 A	19770908	BE19776045914	19770308
BR7701441 A	19780509	BR19770001441	19770309
CA1082881 A1	19800805	CA19770273560	19770309
CH630321 A	19820615	CH19770002960	19770309
DE2609831 A1	19770922	DE19762609831	19760310
DE2609831 B2	19790523	DE19762609831	19760310
ES456366 A1	19780116	ES19770456366	19770228
FR2343698 A1	19771007	FR19770005287	19770223
FR2343698 B1	19800912	FR19770005287	19770223
GB1560503 A	19800206	GB19770009013	19770303
IT1071600 A	19850410	IT19770067524	19770309
JP52109494 A2	19770913	JP19770025535	19770310
NL182159 B	19870817	NL19770000843	19770127

NL182159 C	19880118	NL19770000843	19770127
NL7700843 A	19770913	NL19770000843	19770127
NO150954 B	19841008	NO19770000327	19770201
NO150954 C	19850116	NO19770000327	19770201
NO770327 A	19770913	NO19770000327	19770201
NO770327 L	19770913	NO19770000327	19770201
SE7702740 A	19771021	SE19770002740	19770310
SE7702740 L	19771021	SE19770002740	19770310
US4190632 A	19800226	US19770775217	19770307

Priority:

DE19762609831 19760310 CA19770273560 19770309

Probable Assignee: DEGUSSA

Assignee(s): (std): DEGUSSA

Assignee(s): DEGUSSA AKTIENGESELLSCHAFT ; DEGUSSA AKTIENGESELLSCHAFT TE FRANKFORT A D MAIN BONDSREPUBLIEK DUITSLAND ; DEUTSCHE GOLD AND SILBERSCHNEIDANSTALT VORMALS ROESSLER ; DEUTSCHE GOLD SILBER SCHNEIDANST ; DEUTSCHE GOLD U SILBER SCHNEIDANSTALT ; DEUTSCHE GOLD U SILBER SCHNEIDANSTALT WAS ROESSL.. ; DEUTSCHE GOLD U SILBER SCHNEIDANSTALT was ROESSLER.. ; DEUTSCHE GOLD UND SILBER SCHNEIDANSTALT ; DEUTSCHEGOLD UND SILBER SCHNEIDANSTALT VORMALS ROES ; DEUTSCHE GOLD UND SILBER SCHNEIDANSTALT VORMALS ROESSLER ; DEUTSCHE GOLD UND SILBER SCHNEIDANSTALT VORMALS ROESSLER 6000 FRANKFURT ; DEUTSCHE GOLD UND SILBER SCHNEIDANSTALT VORMALS ROESSLER TE FRANKFORT A D MAIN BONDSREPUBLIEK DUITSLAND ; DEUTSCHE GOLD UND SILBER SCHNEIDANSTALT VORMALS ROESSL ; ER ; TURK GUNTER ; DEUTSCHEGOLD U SILBER SCHNEIDANSTALT WAS ROES.. ; ACHENBACH KARL

Inventor(s): (std): ACHENBACH K ; ACHENBACH KARL ; KARURU ATSUHIENBATSUHA ; TUERK GUENTER ; TUERK GUENTER DR ; TURK G ; TURK GUNTER ; GIYUNTERU TOYURUKU

Inventor(s): K ACHENBACH ; KARL ACHENBACH ; ACHENBACH KARL 6000 FRANKFURT ; DR GUENTER TUERK ; G TURK

Agent(s): MARKS AND CLERK

7) Family number: 671032 (BRPI8601162A) © PatBase

Title: PROCESSO DE PRODUCAO DE TERMOFERTILIZANTES UTILIZANDO-SE ESCORIAS LIQUIDAS DE OBTENCAO DE GUSA EM ALTO FORNO A COQUE TERMOFERTILIZANTES PRODUCTION PROCESS USING LIQUID SLAG FROM ATTAINMENT OF PIG IRON IN BLAST FURNACE COKE (Machine translation)

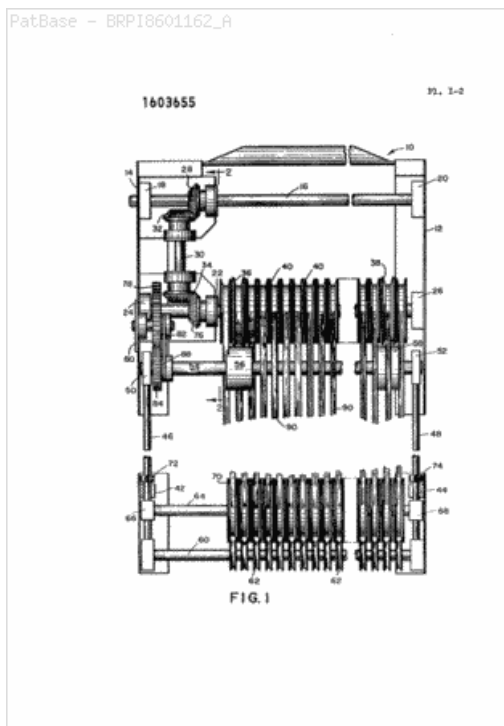
Abstract: Source: BRPI8601162A [PT] IM ss | . » . f i | . IH . ss » . # - I - RESUMO 1) - "PROCESSO DE PRODUCAO DE TERMOFERTILI ZANTES UTILIZANDO-SE ESCORIAS LIQUIDAS DE OBTENCAO DE GUSA EM ALTO FORNO A COQUE", cuja finalidade e a produ- 5 cao de termofertilizantes' com reducao de 80 percent no consumo de energia, com o aproveitamento de escorias liquidas 1 em media 500 kwh/tonelada, resultantes da producao de gusa de alto forno a coque na forma de termofertilizan- tes fosfatados e/ou potassicos, com adicao de pequenos a 10 crescimos de energia, e, consequentemente, gerando pro- dutos de menor custo. O processo consiste na adicao de minerios ou concentrados fosfaticos, minerais ou sais potassicos alem de outros minerios ou sais portadores de nutrien-' 15 tes ou micronutrientes com a utilizacao da metalurgia 1 na panela com fornos de inducao ou fornos eletricos, com a mistura apos sua funcao recebendo um choque termico 1 com agua, cujo volume e pressao sao determinados em funcao da composicao quimida da mistura.

Machine translation: IM » | f IH » . # •-I-1)-SUMMARY "TERMOFERTILI PRODUCTION PROCESS ZANTES using LIQUID SLAG FROM ATTAINMENT of PIG IRON in BLAST FURNACE Coke", whose purpose and produc-5 cao of termofertilizantes ' with 80 percent reduction in energy consumption, with the use of liquid slags 1:00 pm media 500 kwh/tonne, resulting from the production of pig iron from the blast furnace coke in the form of phosphate-termofertilizan and/or potassicos with the addition of the 10 small power crescimos, and thereby generating pro-dutos to lower cost. the process consists in the addition of ores or concentrates, mineral or fosfaticos potassicos salts and other ores or salts nutrients-bearers ' 15 tes or micronutrients with the use of Metallurgy in the pan with 1 inducement ovens or electric ovens, with the mixture after your product getting a thermal shock 1 with water, whose volume and pressure are determined in function of the composition of the mixture quimida.

Classifications:

International (IPC 8-9): C05B5/00 C05D3/04 (Advanced/Invention); C05B5/00 C05D3/00 (Core/Invention)

International (IPC 1-7): C05B5/00 C05D3/04

**Family:**

Publication number	Publication date	Application number	Application date
BRPI8601162 A	19870224	BR1986PI01162	19860317

Priority:

BR1986PI01162 19860317

Probable Assignee: ACESITA ENERGETICA S A
Assignee(s): (std): ACESITA ENERGETICA S A
Inventor(s): (std): SILVEIRA RUBENS CORREA DA
Inventor(s): RUBENS CORREA DA SILVEIRA

8) Family number: 11991038 (DE19545122A1)

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Title: Prepn. of e.g., phosphate fertilisers

Abstract: The following are claimed: (A) prepn. of a calcium-and phosphate-contg. material, comprising reaction of a natural or synthetic calcium contg. mineral with synthetic iron phosphate at elevated temps.. (B) prepn. of slag with elevated phosphate content, comprising reaction of low phosphorus slag with synthetic iron phosphate at elevated temps.. The calcium-contg. mineral is pref. low phosphorus slag, esp. a metallurgical slag, most esp. from iron or steel prod.. This slag also contains CaS and oxides of Si, Al, Mg, Mn, Fe and opt. P. The calcium-contg. mineral or low phosphorus slag contains at least 25 weight percent, esp. 30-60 weight percent CaO.

Classifications:**International (IPC 8-9):** C05B13/00 C05B13/04 C05B17/00 C05B3/00 C05B5/00 (Advanced/Invention)**International (IPC 1-7):** C05B13/04 C05B3/00 C05B5/00**CPC:** C05B3/00 C05B13/00 C05B17/00**European:** C05B13/00 C05B17/00 C05B3/00**Family:**

Publication number	Publication date	Application number	Application date
DE19545122 A1	19960620	DE19951045122	19951204
DE19545122 B4	20070329	DE19951045122	19951204

Priority:

DE1994445117 19941219 DE19951045122 19951204

Probable Assignee: VOLKSWAGEN GROUP

Assignee(s): (std): VOLKSWAGEN AG ; VOLKSWAGEN GROUP ; VOLKSWAGENWERK AG
Assignee(s): VOLKSWAGEN AG 38440 WOLFSBURG DE
Inventor(s): (std): GOCK EBERHARD ; GOCK EBERHARD PROF ; HANNES SUSANNE ; SCHIMROSCZYK BRIGITTE
Inventor(s): SCHIMROSCZYK BRIGITTE 38871 STAPELBURG DE ; HANNES SUSANNE 38678 CLAUSTHAL ZELLERFELD DE

9) Family number: 1239041 (GB1498030A)

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Title: INORGANIC-ORGANIC PLASTICS

Abstract: 1498030 Polyurea xerosols BAYER AG 27 Nov 1974 [30 Nov 1973] 51353/74 Heading C3R A xerosol is obtained by mixing (a) an organic water-insoluble polymer precursor of which at least 0A5 wt. per cent is an isocyanate with (b) an aqueous solution or polymer dispersion containing more water than is required to react with the isocyanate in (a) and one or

more substances capable of binding water by gel-formation or solid hydrate formation due to reaction with CO₂, cooling, or loss of water by reaction with other components, not more than 70 wt. per cent of (b) being alkali metal or ammonium silicate, and optionally (c) one or more hardeners for (a) and/or (b), and optionally (d) one or more additives, to form a dispersion of an aqueous phase in an organic phase, and allowing the dispersion to react to form a xerosol. Besides isocyanate, (a) may contain other polymer precursors, e.g. aminoplast or phenoplast precondensates, epoxy resins and addition polymerizable monomers, notably unsaturated polyester compositions. The solute in (b) may react with CO₂ to form a gel (e.g. alkali metal silicates and aluminates) or hydrate (e.g. NaOH), or form crystals by cooling (e.g. Na₂CO₃, Na₂SO₄ and alum) or concentration (e.g. CaCl₂); concentrated industrial waste solutions may be used; suitable gel-forming soluble polymer precursors include soluble aminoplast, phenoplast, epoxy resin, polyurethane and polyurea precursors. In examples there are prepared first components containing 150 g. of a sulphonated dimer-reduced crude phosgenated aniline-formaldehyde condensate (or, in Ex. 10, 50 g. of this with 100 g. of an unsaturated polyester/styrene mixture and a peroxy catalyst), and optionally 30 g. of a phenolic resin and 10 g. of a sulphonated phenolic resin (Ex. 9), 5-25 g. of CFCI₃, 50 g. of cement (Ex. 3), and fire retardants (20 g. of trichloroethyl phosphate in Ex. 13, 30 g. of chlorinated paraffin in Exs. 19 and 20, and second components containing 100 g. of 50 percent aqueous sodium hexametaphosphate (Ex. 13), saturated Na₂CO₃ (Exs. 5 and 8), 20 or 30 percent aqueous sodium aluminate (Exs. 6, 7, 9, 11, 12 and 13), or mixtures of 44 percent water glass with the hexametaphosphate alone (5: 5 or 6: 4 wt. ratio, Exs. 2 and 4) or with 50 percent urea solution (2: 5: 3, Ex. 10), or 150 g. of mixtures 54 percent water glass with 50-60 percent urea or saturated trisodium phosphate/urea solution, optionally together with 0A5-2 g. of triethylamine, 0A1 g. of an emulsifier, and 50 or 100 g. of cement. On mixing the components hard solid or foamed bodies are formed.

Classifications:

International (IPC 8-9): C08G18/00 C08G18/08 C08G18/30 C08G18/38 C08K3/34 C08L51/00 C08L51/02 C08L67/00

C08L75/00 C08L77/00 (Advanced/Invention);

C08G18/00 C08K3/00 C08L51/00 C08L67/00 C08L75/00 C08L77/00 (Core/Invention)

International (IPC 1-7): B32B C04B25/00 C08G18/08 C08G18/10 C08G18/14 C08G18/83 C08G77/00 C08G77/02

C08G77/54 C08G83/00 C08J C08K3/34 C08L61/04 C08L75/02 C08L75/04 C08L83/00

CPC: C08G18/3895 C08G18/0804 C08G18/302 C08K3/34

European: C08G18/08B C08G18/30D C08G18/38N2 C08K3/34

Family:

Publication number	Publication date	Application number	Application date
BE822645 A	19750527	BE19740150896	19741127
DE2359609 A1	19750605	DE19732359609	19731130
DE2359609 C2	19830929	DE19732359609	19731130
DK620074 A	19750728	DK19740006200	19741129
FR2253051 A1	19750627	FR19740039136	19741129
FR2253051 B1	19790223	FR19740039136	19741129
GB1498030 A	19780118	GB19740051353	19741127
IT1023382 A	19780510	IT19740054201	19741125
JP1107300 C3	19820730	JP19740136393	19741129
JP50087196 A2	19750714	JP19740136393	19741129
JP56053569 B4	19811219	JP19740136393	19741129
LU71389 A	19750820	LU19740071389	19741128
NL7415630 A	19750603	NL19740015630	19741129

Priority:

DE19732359609 19731130 DE19732359609 19731130

Probable Assignee: BAYER AG

Assignee(s): (std): BAYER AG

Assignee(s): BAYER AG 5090 LEVERKUSEN ; BAYER AG DT ; BAYER AKTIENGESellschaft TE LEVERKUSEN
BAYERWERK BONDSREpubliek DUITSLAND ; BAYER DT AG ; BAYER TE LEVERKUSEN BAYERWERK
BONDSREpubliek DUITSLAND AG ; BAYER 5090 LEVERKUSEN AG ; BAYER 5090 LEVERKUSEN DE AG

Inventor(s): (std): MARKUSCH P ; MARKUSCH PETER DR ; DIETERICH D ; DIETERICH DIETER DR

Inventor(s): DIETERICH DIETER DR 1 5090 LEVERKUSEN ; MARKUSCH PETER DR 1 5000 KOELN ; MARKUSCH PETER
DR1 5000 KOELN ; DIETERICH DIETER DR1 5090 LEVERKUSEN

10) Family number: 49148042 (US2014069157A)

© PatBase

Title: COMPOSITION FOR SEED GROWTH AND VIGOUR IN MONOCOTS

Abstract: Coating composition for applying to monocot plant structures from which roots and shoots are capable of growing, wherein the said coating composition comprises one or more organic materials having a melting point of greater than or equal to 50 degrees Centigrade and one or more additives, methods of making such compositions and coated monocot plant structures such as seeds of monocot plants.

Classifications:

International (IPC 8-9): A01C1/06 A01N25/00 A01N25/08 A01N25/12 A01N25/24 A01N25/26 A01P21/00 C05B17/00
C05B17/02 C05F11/08 C05F11/10 C05G3/00 C09D1/00 C09D191/06 C09D5/00 C09D5/03 C09D7/12 (Advanced/Invention)

CPC: A01C1/06 C09D5/00 A01N25/12 C05B17/00 C09D1/00 A01N25/08 A01N25/24 A01N25/26 C05B17/02 C05F11/08
C05G3/0047 C09D5/031 C09D191/06 C09D7/40

US: 71/23

Family:

Publication number	Publication date	Application number	Application date
EP2699085 A2	20140226	EP20120722184	20120419
EP2699085 B1	20190109	EP20120722184	20120419
GB201106764 A0	20110601	GB20110006764	20110420
GB201206970 A0	20120606	GB20120006970	20120419
GB2490249 A1	20121024	GB20120006970	20120419
GB2490249 B2	20151202	GB20120006970	20120419
US2014069157 AA	20140313	US20120112816	20120419
US9732006 BB	20170815	US20120112816	20120419
WO12143685 A2	20121026	WO2012GB00367	20120419
WO12143685 A3	20130613	WO2012GB00367	20120419

Priority:

GB20110006764 20110420 WO2012GB00367 20120419

Probable Assignee: EXOSECT LTD

Assignee(s): (std): EXOSECT LTD ; JESSOP NICHOLAS HUGH HYLTON

Assignee(s): EXOSECT LIMITED

Inventor(s): (std): JESSOP NICHOLAS HUGH HYLTON

Inventor(s): NICHOLAS HUGH HYLTON JESSOP

Agent(s): ANDREWS PAUL DAVID; SCHLICH GEORGE; SUGHRUE MION PLLC; WALTHER WOLFF AND CO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 47632048 (US2012125064A)

© PatBase

Title: BIOCHAR COMPLEX

Abstract: The invention relates to a biochar-containing composition comprising biochar having organic matter therein and/or thereon, clay associated, optionally intercalated, with the organic matter, a non-clay mineral and optionally also a plant growth promoter.

Classifications:

International (IPC 8-9): A01C7/08 B01F15/02 B32B1/02 C05B17/00 C05C11/00 C05F11/00 C05F11/02 C05G C05G3/00 C05G3/04 C09K C09K17/00 C09K17/40 C10B C10B47/00 C10B49/00

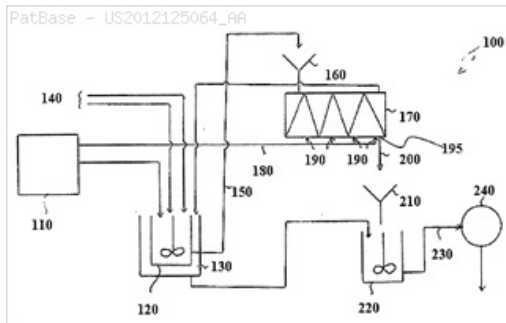
C10B53/00 (Advanced/Invention);

C05G C09K C10B (Subclass/Invention)

CPC: Y10T428/13 C10B53/02 C05C9/02 C05F11/02 C05G3/0052 C10B49/04 C10B57/06 C10B57/14 C10L5/363 C10L5/44 C10L9/083 Y02E50/10 Y02E50/14 Y02E50/15 Y02E50/30

European: C05C9/02 C05F11/02 C05G3/00B6 C10B49/04 C10B53/02 C10B57/06 C10B57/14 C10L5/36D C10L5/44 C10L9/08B Y02E50/10 Y02E50/14 Y02E50/15 Y02E50/30

US: 111/100 111/100S 366/147 366/147S 425/471 425/471S 428/34.1 428/34.100S 504/292 504/292S 504/299 504/299S 504/324 504/324S 504/358 504/358S 71/11 71/11S 71/27 71/27P



Family:

Publication number	Publication date	Application number	Application date
AU2010246895 AA	20101118	AU20100246895	20100507
CA2761816 AA	20101118	CA20102761816	20100507
CN102459509 A	20120516	CN201080029926	20100507
EP2430118 A1	20120321	EP20100774417	20100507
EP2430118 A4	20140820	EP20100774417	20100507
IN09853DN2011 A	20130125	IN2011DN09853	20111214
MX2011012188 A1	20120306	MX20110012188	20100507
US2012125064 AA	20120524	US20100320523	20100507
WO10129988 A1	20101118	WO2010AU00534	20100507
ZA201109150 A	20120725	ZA20110009150	20111212

Priority:

AU20090902209 20090511 AU20090902209 20090515 AU20100900555 20100211
WO2010AU00534 20100507 AU20100246895 20100507

Probable Assignee: VENEARTH GROUP LLC

Assignee(s): (std): ANTHROTERRA PTY LTD ; FOIDL NIKOLAUS ; JOSEPH STEPHEN DAVID ; VENEARTH GROUP LLC

Inventor(s): (std): FOIDL NIKOLAUS ; JOSEPH STEPHEN DAVID ; NIKOLAUS FOIDL ; DAVID JOSEPH STEPHEN

Inventor(s): JOSEPH STEPHEN ; STEPHEN DAVID JOSEPH

Agent(s): SPRUSON AND FERGUSON; GOWLING LAFLEUR HENDERSON LLP; WOLFF FELIX

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

12) Family number: 13409048 (WO9511865A1)

© PatBase

Title: CERAMIC MATERIALS AND METHOD OF MANUFACTURING SUCH MATERIALS

Abstract: The invention relates to a method of mixing incinerated sewage sludge ash (ISSA) and pulverised fuel ash (PFA) so as to produce a raw material suitable for producing building articles such as bricks, tiles or bloated aggregates. A problem with the incineration of sewage sludge to reduce the bulk prior to disposal, is that on incineration of the sludge, heavy metals normally present in raw sewage, are able to survive combustion and may subsequently be concentrated in the ash formed as a combustion residue. This has been undesirable from both an environmental and a health position. The present invention overcomes this problem by utilising a technique of entrapping such toxic species within the fired product, thereby minimising their release. Furthermore, because the heavy metals are entrapped within the bulk of the brick, slab or aggregate, they do not leach from the matrix of the building article and are therefore able to be used in a wider range of applications.

Classifications:

International (IPC 8-9): C04B18/02 C04B33/135 C04B38/06 (Advanced/Invention);

C04B18/00 C04B33/02 C04B38/06 (Core/Invention)

International (IPC 1-7): C04B18/02 C04B18/02 C04B33/13 C04B35/00 C04B38/06 C04B38/06

CPC: Y02W30/92 C04B38/068 C04B18/027 C04B33/1357 Y02P40/69

European: C04B18/02L C04B33/135D2 C04B38/06F2D12

Family:

Publication number	Publication date	Application number	Application date
AU199479980 A1	19950522	AU19940079980	19941026
GB2297971 A1	19960821	GB19960008781	19941026
GB2297971 B2	19970709	GB19960008781	19941026
GB9322067 A0	19931215	GB19930022067	19931026
GB9608781 A0	19960703	GB19960008781	19941026
WO9511865 A1	19950504	WO1994GB02352	19941026

Priority:

GB19930022067 19931026 GB19960008781 19941026 WO1994GB02352 19941026

Probable Assignee: UNIV STAFFORDSHIRE ENTPR LTD

Assignee(s): (std): ANDERSON MICHAEL ; BIRCHALL COLIN ; BRITISH TECH GROUP ; STAFFORDSHIRE POLYTECHNIC ENTE ; UNIV STAFFORDSHIRE ENTPR LTD ; SKERRATT GLYNN

Assignee(s): STAFFORDSHIRE UNIVERSITY ENTERPRISES LIMITED ; STAFFORDSHIRE POLYTECHNIC ENTERPRISES LTD ; STAFFORDSHIRE UNIV ENTERPRISES LTD ; BRITISH TECHNOLOGY GROUP LIMITED ; BRITISH TECHNOLOGY GROUP LTD

Inventor(s): (std): ANDERSON MICHAEL ; BIRCHALL COLIN ; SKERRATT GLYN ; SKERRATT GLYNN

Inventor(s): COLIN BIRCHALL ; GLYN SKERRATT ; GLYNN SKERRATT ; MICHAEL ANDERSON

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA US UZ VN

13) Family number: 49148051 (US2014109636A)

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Title: COMPOSITIONS FOR GROWTH AND VIGOUR IN SOYBEAN

Abstract: Coating composition for applying to soybean seed from which roots and shoots are capable of growing, wherein the said coating composition comprises one or more organic materials having a melting point of ?50 degrees Centigrade and one or more additives, methods of making such compositions and coated soybean seeds.

Classifications:

International (IPC 8-9): A01C1/06 A01N25/00 A01N25/08 A01N25/12 A01N25/24 A01P21/00 C05B17/00 C05D9/02 C05F11/08 C05F11/10 C05G3/00 C09D191/06 C09D5/00 C09D5/03 C09D7/12 (Advanced/Invention)

International (IPC 1-7): A01N25/00 A01N25/08 A01N25/12 C05F11/08 C05G3/00

CPC: A01C1/06 A01N25/24 C09D5/00 A01N25/12 C05B17/00 C05F11/08 C09D7/40 C05G3/0041 A01N25/00 A01N25/08 C05D9/02 C05F11/10 C05G3/0035 C08L2205/18 C09D5/031 C09D191/06

European: A01N25/00 A01N25/08 C05D9/02 C05F11/08 C05F11/10 C05G3/00B2H

US: 71/23 71/7

Family:

Publication number	Publication date	Application number	Application date
BR112013027019 A2	20170704	BR20131127019	20120419
BR112013027019 A8	20180116	BR20131127019	20120419
GB201106759 A0	20110601	GB20110006759	20110420
GB201206967 A0	20120606	GB20120006967	20120419
GB2490246 A1	20121024	GB20120006967	20120419
GB2490246 B2	20151202	GB20120006967	20120419
US2014109636 AA	20140424	US20120112837	20120419
US10029952 BB	20180724	US20120112837	20120419
WO12143682 A2	20121026	WO2012GB00364	20120419
WO12143682 A3	20130613	WO2012GB00364	20120419

Priority:

GB20110006759 20110420 WO2012GB00364 20120419

Probable Assignee: EXOSECT LTD

Assignee(s): (std): EXOSECT LTD ; JESSOP NICHOLAS HUGH HYLTON

Assignee(s): EXOSECT LIMITED

Inventor(s): (std): NICHOLAS HUGH HYLTON JESSOP ; JESSOP NICHOLAS HUGH HYLTON

Agent(s): SUGHRUE MION PLLC; DR WALTHER WOLFF AND CO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

14) Family number: 8479051 (WO9428184A1)

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Title: AN INTEGRATED BIOLEACH/SOLVENT EXTRACTION PROCESS FOR ZINC METAL PRODUCTION FROM ZINC CONCENTRATES

Abstract: Zinc is recovered by an integrated bioleaching, solvent extraction system where the aqueous raffinate from the solvent extraction stage is recycled to the bioleach stage. Operating costs are significantly reduced, pressure vessels are not required, energy costs are reduced, low cost reagents can be used, no gaseous effluents are produced and all by-products can be sold or efficiently stored.

Classifications:

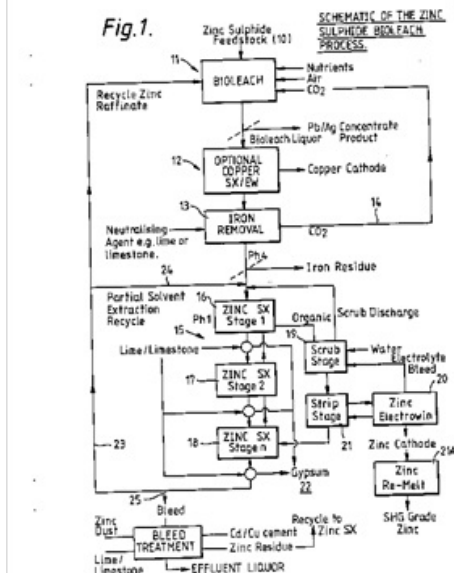
International (IPC 8-9): C22B19/00 C22B19/20 C22B3/18 C22B3/26 (Advanced/Invention);

C22B19/00 C22B3/00 (Core/Invention)

International (IPC 1-7): C22B19/00 C22B19/20 C22B3/18

CPC: Y02P10/234 C22B3/0005 C22B3/18 C22B19/20

European: C22B19/20 C22B3/00D2 C22B3/18



Family:

Publication number	Publication date	Application number	Application date
AU199467896 A1	19941220	AU19940067896	19940524
AU673929 B2	19961128	AU19940067896	19940524
PE11095 A1	19950508	PE19940242894	19940523
TH16491 A	19950829	TH19941000988	19940519
WO9428184 A1	19941208	WO1994AU00266	19940524

Priority:

AU1993PL08982 19930525 AU19940067896 19940524 WO1994AU00266 19940524

Probable Assignee: MIM HOLDINGS LIMITED

Assignee(s): (std): MIM HOLDINGS LIMITED ; MIM HOLDINGS LTD ; SHEEHAN GREGORY JOHN ; STEEMSON MARK
LAURENCE ; WINBORNE DAVID ARTHUR ; WONG FOOK SIN

Inventor(s): (std): SHEEHAN GREGORY JOHN ; STEEMSON MARK LAURENCE ; WINBORNE DAVID ARTHUR ; WONG FOOK SIN

Inventor(s): Steemson ; DAVID ARTHUR WINBORNE ; FOOK SIN WONG ; GREGORY JOHN SHEEHAN ; Mark Laurence ; MARK LAURENCE STEEMSON

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SPRUSON AND FERGUSON

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP
KG KP KR KZ LK LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ
TT UA US UZ VN

15) Family number: 8975054 (GB2109212A)

Title: Agricultural method and composition

Abstract: Agricultural land is treated with a combustion product of a solid fossil fuel, particularly pulverised fuel ash, whereby heavy soil is rendered more permeable and light sandy soil less liable to drying out. A mixture of such a combustion product with a fertiliser material and/or soil is also claimed.

Classifications:

International (IPC 8-9): C05D9/00 C09K17/04 (Advanced/Invention);
C05D9/00 C09K17/02 (Core/Invention)

International (IPC 1-7): C 09K 17/00

CPC: C05D9/00 C09K17/04

European: C05D9/00 C09K17/04

Family:

Publication number	Publication date	Application number	Application date
GB2109212 A1	19830602	GB19810034625	19811117

Priority:

GB19810034625 19811117

Probable Assignee: EVANS WILLIAM DAVID

Assignee(s): (std): EVANS WILLIAM DAVID

Assignee(s): WILLIAM DAVID EVANS

Inventor(s): (std): EVANS WILLIAM DAVID

Inventor(s): WILLIAM DAVID EVANS

Classifications:**International (IPC 8-9):** A01C21/00 A01N25/12 C05B15/00 C05B17/00 C05C1/00 C05C11/00 C05C3/00 C05C9/00

C05F1/00 C05F17/00 C05F3/00 C05F5/00 C05G1/00 C05G3/00 (Advanced/Invention)

CPC: C05B17/00 A01C21/00 A01N25/12 C05C11/00 C05G3/00 C05G3/0058 C05C3/00 C05B15/00 C05C1/00 C05C9/00

C05F17/0045 C05G1/00 Y02E50/343 Y02P20/145 Y02W30/43 Y02W30/47 C05F1/005 C05F5/00 C05F11/00 C05F3/00 C05F1/00

US: 1/1 71/15 71/22 71/23**Family:**

Publication number	Publication date	Application number	Application date
EA029342 B1	20180330	EA20140091600	20130227
EA201491600 A1	20150130	EA20140091600	20130227
EP2819974 A1	20150107	EP20130716333	20130227
FI123395 B	20130328	FI20120005220	20120228
US2015101376 AA	20150416	US20130381250	20130227
US9394207 BB	20160719	US20130381250	20130227
WO13128080 A1	20130906	WO2013FI50223	20130227

Priority:

FI20120005220 20120228 WO2013FI50223 20130227

Probable Assignee: BIOKASVU OY**Assignee(s):** (std): BIOKASVU OY**Inventor(s):** (std): TILKANEN JUHA ; LEHTONEN KEIJO**Agent(s):** BERGGREN OY AB; BERGGREN INC**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**19) Family number: 11153076 (US5374294A)**

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Title: Controlled release potassium divalent metal phosphate fertilizer

Abstract: A controlled slow release potassium divalent metal phosphate composition for agriculture and an effective method of preparing the composition. The cold water insolubilities of each of the contained nutrients are between 35 and 98 percent. The potassium exhibits an Activity Index between 20 and 85. The release of all contained nutrients is substantially complete in one growing season without damage to plant foliage or roots. Divalent metals effectively forming the new composition include magnesium, manganese, zinc, iron, cobalt, and copper. The effective method of preparing the new composition requires the exothermic coreaction of concentrated potassium hydroxide, divalent metal oxide powder, and concentrated phosphoric acid, with a molecular ratio of 1 potassium/1 divalent metal/1 phosphate with the total water content of the initial reaction mixture between 20 and 50 percent, at a maximum temperature between 85 DEG and 150 DEG C., until damp dry, particulate, water insoluble potassium divalent metal phosphate is formed.

Classifications:**International (IPC 8-9):** C01B25/45 C05B17/00 C05B7/00 C05B9/00 (Advanced/Invention);

C05B9/00 (Advanced/Non-invention);

C01B25/00 C05B17/00 C05B7/00 C05B9/00 (Core/Invention)

International (IPC 1-7): C01B25/26 C01B25/45 C05B17/00 C05B17/02 C05B19/00 C05B9/00 C05D1/00 C05D9/02 C05G1/00**CPC:** C05B7/00 C05B17/00**European:** C05B17/00 C05B7/00**US:** 423/306 71/41 71/46 71/51**Family:**

Publication number	Publication date	Application number	Application date
AU199469547 A1	19941212	AU19940069547	19940519
AU199858371 A1	19980521	AU19980058371	19980311
AU684290 B2	19971211	AU19940069547	19940519
AU708338 B2	19990805	AU19980058371	19980311
BRPI9406543 A	19960102	BR1994PI06543	19940519
CA2161553 AA	19951026	CA19942161553	19940519
CA2161553 C	20010710	CA19942161553	19940519
DE69420724 D1	19991021	DE19946020724	19940519
DE69420724 T2	20000406	DE19946020724T	19940519
EP0701532 A1	19960320	EP19940918065	19940519
EP0701532 A4	19971008	EP19940918065	19940519
EP0701532 B1	19990915	EP19940918065	19940519
ES2135583 T3	19991101	ES19940918065T	19940519
FI955569 A	19951117	FI19950005569	19951117
FI955569 A0	19951117	FI19950005569	19951117
IL109662 A0	19940826	IL19940109662	19940517
IL109662 A1	19991130	IL19940109662	19940517
JP9505021 T2	19970520	JP19940525823T	19940519
NO310681 B1	20010813	NO19950004630	19951116
NO954630 A	19951116	NO19950004630	19951116
NO954630 A0	19951116	NO19950004630	19951116
NO954630 L	19951116	NO19950004630	19951116
PH30812 A	19971017	PH19940048295	19940518
US5374294 A	19941220	US19930064718	19930519
WO9426660 A1	19941124	WO1994US05699	19940519

Priority:

US19930064718 19930519

AU19940069547 19940519

WO1994US05699 19940519

Probable Assignee: AGRI NUTRIENTS TECHNOLOGY GROUP INC

Assignee(s): (std): VIGORO CORP ; LESCO TECHNOLOGIES LLC ; LESCO INC

Assignee(s): LESCO INC ROCKY RIVER ; PNC BANK NATIONAL ASSOCIATION ; MOORE WILLIAM P ; AGRI NUTRIENTS TECHNOLOGY GROUP INC ; AGRINUTRIENTS TECHNOLOGY GROUP ; AGRINUTRIENTS TECHNOLOGY GROUP INC ; IMC AGRIBUSINESS INC ; KPAC HOLDINGS INC

Inventor(s): (std): MOORE WILLIAM P

Inventor(s): WILLIAM P MOORE

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; DEETH WILLIAMS WALL LLP; REINHOLD COHN AND PARTNERS

Designated states: AT AU BE BR BY CA CH CZ DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO NZ PL PT RO RU SE SK UA

20) Family number: 60547076 (WO15149121A1)

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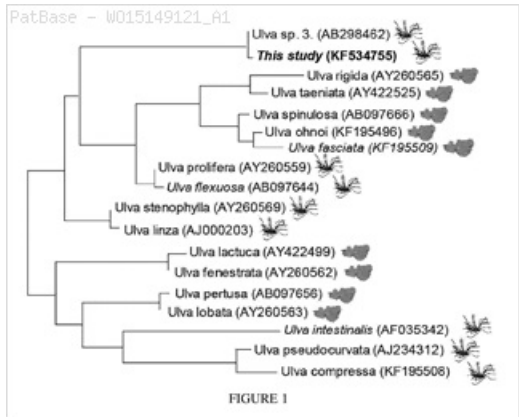
Title: METHOD FOR THE CULTIVATION AND PRODUCTION OF MACROALGAE

Abstract: A method is provided for the cultivation and/or production of green macroalgae, such as *Ulva* spp. The green macroalgae are exposed to a temperature shock, such as a cold shock or a heat shock to induce reproduction, then maintained under suitable conditions. The method may further comprise fragmenting the temperature shocked green macroalgae. Green macroalgae may be produced according to the invention, such as for the production of biomass, wastewater treatment, bioremediation, human consumption, animal feed, and/or feedstock for the supply of pharmaceuticals, nutraceuticals, cosmeceuticals and/or biofuels. The method may be performed within a marine or brackish water environment, such as an aquaculture farm.

Classifications:

International (IPC 8-9): A01G33/00 (Advanced/Invention)

CPC: A01G33/00 Y02A40/241



Family:

Publication number	Publication date	Application number	Application date
WO15149121 A1	20151008	WO2015AU50112	20150317

Priority:

AU20140901160 20140331

Probable Assignee: MBD ENERGY LTD

Assignee(s): (std): MBD ENERGY LTD ; UNIV JAMES COOK

Assignee(s): JAMES COOK UNIV

Inventor(s): (std): CARL CHRISTINA ; DE NYS ROCKY ; PAUL NICHOLAS

Agent(s): FISHER ADAMS KELLY PTY LTD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

21) Family number: 22787090 (US3049419A)

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Title: GRANULAR FERTILISERS

Abstract: (Claim 1) 1. A process of manufacturing, substantially water insoluble granular potassium metaphosphate consisting essentially of completely reacting a potassium salt selected from the group consisting of potassium chloride and potassium sulphate, with a phosphoric acid at a temperature of above 350° C. but below the fusion point of potassium metaphosphate, said reaction being carried out on a mass of moving inert particles unable to react with said reactants to any substantial degree, and selected from the group consisting of potassium metaphosphate, potassium chloride and potassium sulphate, as to provide a dry layer of potassium metaphosphate on each of said inert particles thereby yielding the desired granular end product.

Classifications:

International (IPC 8-9): C05B13/06 (Advanced/Invention);

C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/06

CPC: C05B13/06

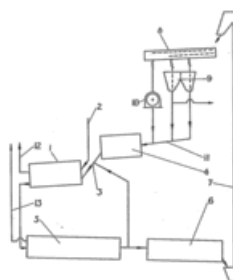
European: C05B13/06

US: 423/314 71/37 71/64.03 71/64.04

Aug. 14, 1962

B. RAISTRICK ET AL
GRANULAR FERTILIZERS
Filed May 2, 1960

3,049,419



INVENTORS
BERNARD RAISTRICK
JOHN STEWART RAITT
BY *Cushman, Dancy & Cushman*
ATTORNEYS

Family:

Publication number	Publication date	Application number	Application date
US3049419 A	19620814	US19600026305	19600502

Priority:

US19600026305 19600502

Probable Assignee:	SCOTTISH AGRICULTURAL IND LTD
Assignee(s): (std):	SCOTTISH AGRICULTURAL IND LTD
Assignee(s):	SCOTTISH AGRICULTURAL INDUSTRIES LIMITED
Inventor(s): (std):	BERNARD RAISTRICK ; STEWART RAITT JOHN
Inventor(s):	RAISTRICK BERNARD ; RAITT JOHN STEWART

22) Family number: 19029098 (GB469833A)

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Title: PROCESS FOR PRODUCING FERTILISERS

Abstract: A fertilizer is obtained by calcining raw phosphate with lime and silica at temperatures up to about 1450 DEG C., the proportions of the ingredients being such that the product of calcination contains about 58--65 per cent of CaO, about 15--25 per cent of P₂O₅ and about 15--25 per cent of SiO₂. The product contains the compound 9CaO.P₂O₅.3SiO₂ or the compound 16CaO.2P₂O₅.5SiO₂. When the process is conducted in a rotary furnace no snitering occurs and a non-caking loose powder is produced even when fluorine-bearing raw phosphates are used. The lime may be added as calcium carbonate or limestone, or any compound forming lime on calcination and the silica may be added in the form of sand and c. Calcium silicate or slags chiefly consisting thereof may also be used. Raw phosphates rich in lime and silica may be used. The calcination is preferably effected in an atmosphere of steam. The Specification as open to inspection under Sect. 91 comprises also the replacement of the silica in part by alumina or ferric oxide and the replacement of the lime in part by magnesia. This subject-matter does not appear in the Specification as accepted. ALSO: A fertilizer is obtained by calcining raw phosphate with lime and silica at temperatures up to about 1450 DEG C., the proportions of the ingredients being such that the product of calcination contains about 58-65 per cent of CaO, about 15-25 per cent of P₂O₅, and about 15-25 per cent of SiO₂. When the process is conducted in a rotary furnace no sintering occurs and a non-caking loose powder is produced even when fluorine-bearing raw phosphates are used. The lime may be added as calcium carbonate or limestone or any compound forming lime on calcination and the silica may be added in the form of sand and c. Calcium silicate or slags chiefly consisting thereof may also be used. Raw phosphates rich in lime and silica may be used. The calcination is preferably effected in an atmosphere of steam. The Specification as open to inspection under Sect. 91 comprises also the replacement of the silica in part by alumina or ferric oxide or the lime in part by magnesia. This subject-matter does not appear in the Specification as accepted.

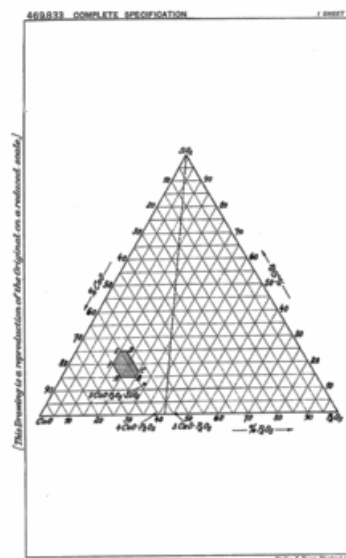
Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);
C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

**Family:**

Publication number	Publication date	Application number	Application date
GB469833 A	19370804	GB19360005414	19360222

Priority:

GB19360005414 19360222

Probable Assignee: KAISER WILHELM INST F EISEN**Assignee(s):** (std): KAISER WILHELM INST F EISEN ; KAISER WILHELM INST F EISENFORSCHUNG EV ; KAISER WILHELM INST FUR EISEN**Assignee(s):** KAISER WILHELM INSTITUT FUR EISENFORSCHUNG EINGETRAGENER VEREIN ; KAISER WILHELM INST F EISENFORSCHUNG EINGETRAGENER VEREIN**23) Family number: 49343108** (DOP2001000169A)

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Title: PROCEDIMIENTO PARA LA PRODUCCION CONJUNTA DE TERMOFOSFATO DE MAGNESIO Y NIQUEL METHOD FOR PRODUCING MAGNESIUM thermophosphate JOINT AND NICKEL (Machine translation)

Abstract: Source: DOP2001000169A [ES] El ss presente invento se refiere a un proceso para produccion conjunta de termo fosfato de magnesio y niquel, que comprende las etapas de: a preparacion previa de la materia prima utilizada en la produccion del termo fosfato, por adiccion al material fosfatado de una serpentita con contenido De niquel y ajuste de la humedad de las mezclas, por adiccion de agua en el Mezclador, para obtencion de una masa aglomerante; b preparacion de la Carga para la mezcla alimentada en un horno electrico, por un tratamiento metalurgico en un horno rotativo que presenta caracteristicas operativas tipicas y de funcionamiento propias; y c utilizacion de recursos especiales para la Fusion de la mezcla en horno electrico.

Machine translation: The ss present invention relates to a process for combined production of phosphate thermo magnesium and nickel, comprising the steps of: a prior preparation of the raw material used in the production of phosphate heat, by adding to the phosphating material serpentita with a nickel content and moisture adjustment of the mixtures by adding water into the mixer, for obtaining a binder mass; b preparation of Charge for fed into an electric furnace for metallurgical treatment in a rotary kiln having characteristics typical operational performance and own mixture; and c use of special resources for Fusion mix in electric oven.

Classifications:**Family:**

Publication number	Publication date	Application number	Application date
DOP2001000169 A	20030215	DO20010000169	20011217

Priority:

DO20010000169 20011217

Probable Assignee: ANGLO AMERICAN BRASIL LTDA**Assignee(s):** (std): ANGLO AMERICAN BRASIL LTDA**Inventor(s):** (std): BASTISTA PEDRO PAULO ; DURAN GUSTAVO VENTRELLA**Inventor(s):** GUSTAVO VENTRELLA DURAN ; PEDRO PAULO BASTISTA**24) Family number: 67441121** (US2019144893A)

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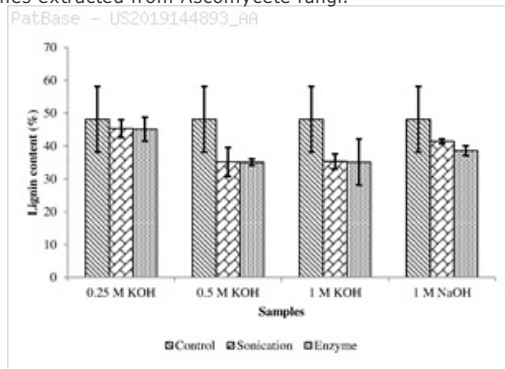
Title: A METHOD OF OBTAINING USEFUL MATERIAL FROM PLANT BIOMASS WASTE

Abstract: A method of obtaining useful material from plant biomass waste. The method uses sonication and/or microwave irradiation followed by sequential incubation with mixed fungal cultures. In particular, the method involves obtaining useful

material from plant biomass waste comprising the steps of: a) subjecting the biomass waste to microwave irradiation and/or sonication; b) incubating the biomass waste from step a) with one or more enzymes extracted from Basidiomycete fungi; and c) incubating the biomass waste from step b) with one or more enzymes extracted from Ascomycete fungi.

Classifications:

International (IPC 8-9): C12P1/02 C12P19/02 C12P19/14 C12P7/10 (Advanced/Invention)
CPC: C12P7/10 C12P7/08 C12P19/02 C12P19/14 C12P2201/00 Y02E50/16 C12Y302/01008 C12Y302/01021 C12Y110/03002 C12Y111/01014 C12Y302/01004



Family:

Publication number	Publication date	Application number	Application date
AU2017260571 AA	20181122	AU20170260571	20170502
US2019144893 AA	20190516	US20170098608	20170502
WO17190188 A1	20171109	WO2017AU50403	20170502

Priority:

AU20160901600 20160502 WO2017AU50403 20170502

Probable Assignee: VIRIDI INNOVATIONS PTY LTD

Assignee(s): (std): SWINBURNE UNIV OF TECHNOLOGY ; VIRIDI INNOVATIONS PTY LTD

Inventor(s): (std): PALOMBO ENZO ; BEALE DAVID ; HARDING IAN H ; KARPE AVINASH

Agent(s): DAVIES COLLISON CAVE PTY LTD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

25) Family number: 22253129 (GB996661A)

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Title: Formation of alkali metal aluminates

Abstract: Alkali metal aluminate, together with hydrogen fluoride, is formed by heating a solid mixture which includes an alkaline earth metal fluoride, a source of an alkali metal monoxide and free and/or combined silica and alumina to a temperature of at least 1000 DEG C. in the presence of water vapour. The mix should contain sufficient alkaline earth metal fluoride to eliminate all silica as alkaline earth metal silicate. Preferably, the molar proportions of alkaline earth metal fluoride, alkali metal monoxide, silica and alumina are 2: 1: 1: 1, and the mix is heated to a temperature of from 1000 DEG C. to 1300 DEG C. for from 15 to 120 minutes. Highly siliceous materials containing alumina, for example bauxites, aluminous clays, kaolin and red mud waste from the Bayer process in bauxite reducing plants, and alkaline earth metal fluorides, for example fluorspars and by-product calcium fluoride from the defluorination of phosphate rock, may be used. To obtain the preferred molar proportions, siliceous material and a source of alkali metal monoxide, for example soda ash, may be added as required to the mix. From the resulting sinter, alkali metal aluminate may be leached out by known methods, and the aluminate solution may then react with the hydrogen fluoride, which may be recovered from the effluent combustion gases, to form cryolite.

Classifications:

International (IPC 8-9): C01F7/04 (Advanced/Invention); C01F7/00 (Core/Invention)
CPC: C01F7/04
European: C01F7/04

Family:

Publication number	Publication date	Application number	Application date
GB996661 A	19650630	GB19630038668	19631001

Priority:

GB19630038668 19631001

Probable Assignee: REYNOLDS METALS CO

Assignee(s): (std): REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY

Inventor(s): (std): ADKINS FREDERICK EARL ; HRISHIKESAN KIZHAKKE GOVIND

26) Family number: 2684131 (DD159065A)

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Title: HERSTELLUNG VON DUENGEMITTELN AUF DER BASIS VON ABWAESSERPHOSPHATEN PRODUCTION OF FERTILISERS ON THE BASIS OF ABWAESSERPHOSPHATEN (Machine translation)

Abstract: Source: DD159065A [DE] [Source: Claim 1] Erfindungsanspruch 1ss Verfahren zur Herstellung von Duengemitteln auf der Basis von Abwasserphosphaten durch Sorption und Reaktion von industriellen» oder kommunalen Abwaessern insbesondere nach einer mechanischen und/oder biologischen Reinigung an und mit Feststoffen, gekennzeichnet dadurch, da# als Feststoffe uebliche duengewirksame Stoffe -bzw. Industriel- le Produkte und Anfallstoffe mit duengewirksamen,Bestand- teilen verwendet werden und diese einzeln, In Mischung oder in Kombination entweder in koerniger oder stueckiger Form direkt und/oder nach mechanischer Aktivierung und/ oder nach stabiler Formgebung mit dem

Abwasser in Kon». takt gebracht werden und nach dem Erreichen der Phosphat- Aufnahmekapazität bei ausreichender P-Reinigung und gleichzeitiger Reduzierung der Salzfracht des Abwassers, als Düngemittel direkt eingesetzt oder zu einem P-Dünger- mittel in bekannter Weise aufgearbeitet werden. 2. Verfahren nach Punkt 1, gekennzeichnet dadurch, dass als düngewirksame Stoffe karbonat- und/oder phosphathaltige mineralische Düngemittel, wie z. B. Kalkmergel, Magnesiummergel, Magnesumphosphat, bzw. chemisch gefällter Kalk, wie z. B. Leunakalk und apatitische Bohphosphate eingesetzt werden. 3. Verfahren nach Punkt 1, gekennzeichnet dadurch, dass als industrielle Produkte und Anfallstoffe basisch wirkende oxidische- und/oder hydroxidische Stoffe, wie z. B. Mischkalk, Karbidkalkhydrat oder Loeschkalk allein oder in Mischung, vorteilhafterweise nach Formgebung verwertet werden. 4. Verfahren nach Punkt 1, gekennzeichnet dadurch, dass als industrielle Anfallstoffe Hochofen- und Stahlwerkschlacken als Schlackengranulate direkt oder in grob gebrochener und/oder in aufgemahlener Form eingesetzt werden. 5. Verfahren nach Punkt 1 bis 4, gekennzeichnet dadurch, dass als apatitische Rohphosphate insbesondere sedimentäre, karbonatreiche und/oder wertstoffarme Phosphorite eingesetzt werden, die sich nach der P-Anreicherung entweder direkt oder nach chemischem bzw. thermischem Aufschluss als P-Düngemittel verwenden lassen. 6. Verfahren nach Punkt 1 bis 5, gekennzeichnet dadurch, dass die Formgebung nach Zusatz von hydraulisch abbindenden oder zur Erhaltungsfähigkeit führenden Stoffen wie z. B. Braunkohlenfilterasche, Zement und/oder Wasserglas in dafür bekannten Einrichtungen vorgenommen wird und vor dem Einsatz gegebenenfalls eine Zerkleinerung der stückig gemachten Stoffe auf bestimmte Korngrößen erfolgt. 7. Verfahren nach Punkt 1 bis 6, gekennzeichnet dadurch, dass die körnigen oder stückigen, mechanisch aktivierten und/oder granulierten Feststoffe allein oder in Kombination mit dem Abwasser in Füllbett- und/oder Fließbettreaktoren in Kontakt gebracht werden, die so gekoppelt sind, dass ein wahlweises Durchfließen mit Abwasser, gegebenenfalls eine Mehrstufensorption, bei gleichzeitiger Beraumung bestimmter Reaktoren erfolgt.

Machine translation: [Source: claim 1] «Invention claim 1 ss procedures for the production of fertilizers using waste water phosphates by sorption and reaction of industrial» or urban waste water especially after a mechanical or biological cleaning and with solids, marked as such as solids usual duhgewirksame substances or industrial products and attack substances with duengewirksamen, stock-share be used and these individually, In mixture or in combination either in grain or lump form directly or after mechanical activation and / or after the robust design with the Wastewater in Kon. clock are brought and after reaching the Phosphat-retention capacity sufficient P cleaning and reducing the salt freight of wastewater, fertilizer directly employed as, or worked to a P-fertilizer medium in known way. 2. proceedings under point 1, characterised by the fact that as duengewirksame karbonat - or phosphate-containing mineral fertilizers, such as such as calcareous Marl, drill siummergel, magnesium phosphate, or chemically precipitated chalk, as used E.g. Leuna lime and apatitische Bohphosphate. 3. proceed according to point 1, marked by that as industrial products and attack substances basic acting oxidische-and / or hydroxidische materials, e.g. z, b mixing lime, carbide calcium hydroxide or slaked lime alone or in mixture, be advantageous erweise det used to shape. «4. procedures according to point 1, marked by the fact that as industrial attack blast furnace» and Stahlwerkschlack-ken directly or in a grossly gebroche-and/or aufgemahlener Form used as a slag granules ss j r mi a n n, l. i \ r. f j 4 U O V ss-w w 1 3 i 5 ss procedures according to point 1 to 4, characterised by the fact that ale apatitische raw phosphate Inebeondere will be sedimentary, carbonate-rich or low-value fabric phosphorite that are as P fertilizer used in either directly or after chemical or thermal information after the P enrichment. 6 procedure - according to point 1 to 5, marked by that shaping after addition of hydraulically hardening or hardening ' leading materials ' as such as-Braunkoh-lenfilterasche, cement or glass of water in it already knew facilities is made before a single set of necessary and crushing of the stueckiggemach-ten substances to certain ' grain sizes is. 7 process according to point 1 up. 6, marked by the fact that the granular or lumpy, mechanically activated and / or granulated. Solids alone or in combination with the sewage in Füllbett - or fluid bed reactors in contact are brought, that are so linked that is an optional flow through with sewage, if necessary, a multi-stage sorption at simultaneous clearing of certain reactors.

Classifications:

International (IPC 8-9): C05F7/00 (Advanced/Invention); C05F7/00 (Core/Invention)

International (IPC 1-7): C05F7/00

CPC: Y02A40/213

Family:

Publication number	Publication date	Application number	Application date
DD159065 A1	19830216	DD19810230106	19810520

Priority:

DD19810230106 19810520

Probable Assignee: HARENZ HEINZ

Assignee(s): (std): HARENZ HEINZ ; PAUDERT ROMANN

Assignee(s): PAUDERT ROMANN DD ; HARENZ HEINZ DD

Inventor(s): (std): HARENZ HEINZ ; PAUDERT ROMANN

Inventor(s): PAUDERT ROMANN DD ; HARENZ HEINZ DD

27) Family number: 30753132 (GB1301005A)

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Title: SUSPENSION FERTILIZER

Abstract: 1301005 Suspension fertilizers; bentonite and attapulgite sols STANDARD OIL CO 16 July 1970 [24 July 1969] 34471/70 Headings C1A and C1B A fertilizer comprises an aqueous suspension which includes at least 30 percent by weight plant nutrient (e.g. compounds of nitrogen, phosphorus and potassium and small amounts of compounds of iron, magnesium, manganese, nickel, zinc, and c.) and enough attapulgite or bentonite clay in the form of a sol to substantially inhibit settling out of solids from the suspension, which clay sol comprises from 5 to 30 weight per cent clay, based on total sol weight, and from 1 to 5 weight per cent (based on clay weight) of a condensed phosphate, e.g. lithium, sodium or potassium tripolyphosphates, tetrapotassium pyrophosphate, mixtures of ammonium polyphosphates, tetrasodium or tetralithium pyrophosphate. A method of producing such a fertilizer comprises blending plant nutrient, clay, condensed phosphate and water together to form a suspension. An improvement in such a method involves entraining an inert gas in the suspension to buoy up solids which tend to settle. A suitable gas is air and 3 to 10 volume per cent air may be entrained in the suspension.

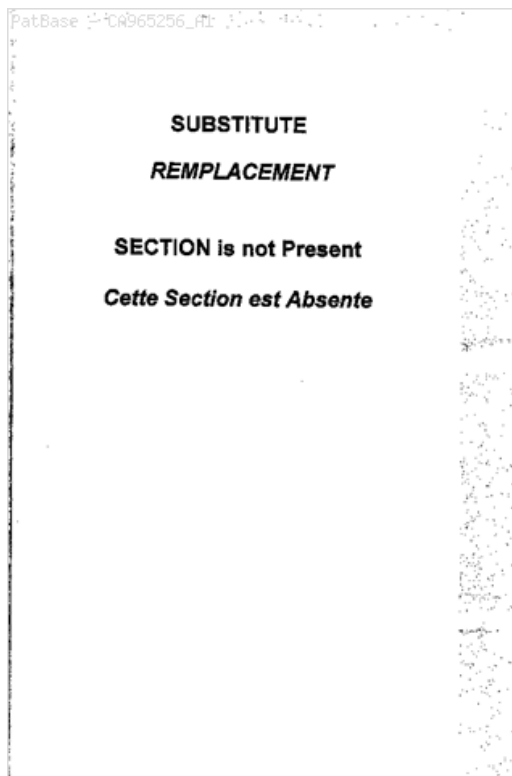
Classifications:

International (IPC 8-9): C05B13/06 C05G5/00 (Advanced/Invention); C05B13/00 C05G5/00 (Core/Invention)

International (IPC 1-7): C05G3/00 C05G3/06

CPC: C05B13/06

European: C05B13/06 C05B13/06+G3/00PR



Family:

Publication number	Publication date	Application number	Application date
CA965256 A1	19750401	CA19700088367	19700716
GB1301005 A	19721229	GB19700034471	19700716
JP50021945 B4	19750726	JP19700064029	19700723

Priority:

US19690844605 19690724

Probable Assignee: STANDARD OIL CO

Assignee(s): (std): STANDARD OIL CO

Assignee(s): STANDARD OIL COMPANY ; WINDGASSEN RICHARD J

Inventor(s): (std): WINDGASSEN RICHARD J

28) Family number: 29593156 (FR1498383A)

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Title: ENGRAIS AGGLOMERES SOUS FORME DE BRIQUETTES, LEUR FABRICATION ET LEURS APPLICATIONS

Abstract: Source: FR1498383A [FR] (Claim 1) ****ATTENTION**** debut du champ CLMS peut contenir fin de DESC ******. tante pour que le corps, selon l'invention, garde sa forme et ses dimensions pendant les operations ulterieures, et notamment celles de demoulage, refroidissement, manutention, transport, stockage.

Machine translation: (Claim 1) **** WARNING **** start of CLMS field may contain end of DESC ******. aunt to the body, according to the invention retains its shape and size during subsequent operations, including those of stripping, cooling, handling, transport, storage.

Classifications:

International (IPC 8-9): B01J2/00 B01J2/22

C05G3/00 (Advanced/Invention);

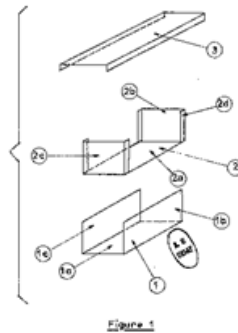
B01J2/00 B01J2/22 C05G3/00 (Core/Invention)

International (IPC 1-7): C05G1/00 F16M1/04

CPC: B01J2/00 B01J2/22 C05G3/0052

European: B01J2/00 B01J2/22 C05G3/00B6

N° 1.498.383 Société dév : Pl. usines
 Produits Chimiques Pechiney-Saint-Gobain

**Family:**

Publication number	Publication date	Application number	Application date
BE700089 A	19671218		19670616
DE1592735 A1	19720217	DE19671592735	19670614
DE1592735 C3	19730315	DE1967P0042358	19670614
ES341837 A1	19680701	ES19670341837	19670615
FR1498383 A	19671020	FR19660065826	19660617
GB1194362 A	19700610	GB19670027841	19670616
GR33072 B	19671026	GR19670133072	19670614
NL6708424 A	19671218	NL19670008424	19670616

Priority:

FR19660065826 19660617

Probable Assignee: PECHINEY SAINT GOBAIN**Assignee(s):** (std): PECHINEY SAINTGOBAIN PARIS PROD CHIM ; PECHINEY SAINTGOBAIN PROD CHIM ; PROD CHIMIQUES PECHINEY SAINT ; UGINE KUHLMANN ; PECHINEY SAINT GOBAIN**Assignee(s):** PECHINEY SAINT GOBAIN PROD CHIM ; PRODUITS CHIMIQUES PECHINEY SAINT GOBAIN ; PRODUITS CHIMIQUES PECHINEY SAINT GOBAIN ; PRODUITS CHIMIQUES ; PROD CHIM**Inventor(s):** (std): PROVOOST MARGUERITE ; PROVOOST MARGUERITE PARIS**29) Family number: 51568158** (IN194747B)

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Title: A PROCESS FOR THE MANUFACTURE OF SLOW-RELEASE FERTILIZERS

Abstract: A process for preparation of slow release cationic micronutrient fertilizers, which processes comprises heating at such as herein described least one micronutrient metel or a compound thereof^ with or such as herein described without additives^ with phosphoric acid ti11 the resultant (the correspondir mixture is mostly homogenous, further heating, to form metal, polyphosphates of such a degree of polymerisation that they are still soluble in dilute mineral acids and complexants, treating said metal polyphosphates with a basic compound and finally obtaining a dried powder.

Classifications:**International (IPC 1-7):** C05B11/10 C05C3/00**Family:**

Publication number	Publication date	Application number	Application date
IN194747 B	20090724	IN1999CA00010	19990106

Probable Assignee: CHANRIKA VARADACHARI**Assignee(s):** CHANRIKA VARADACHARI**Inventor(s):** CHANDRIKA VARADACHARI**30) Family number: 49146182** (WO12143683A2)

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Title: COMPOSITIONS FOR GROWTH AND VIGOUR IN ORNAMENTALS

Abstract: Coating composition for applying to plant structures of ornamental plants such as a seed of ornamental plants from which roots and shoots are capable of growing, wherein the said coating composition comprises organic material in particulate form having a melting point of > 50 degrees Centigrade, methods of making such compositions and coated ornamental plant structures.

Classifications:**International (IPC 8-9):** A01C1/06 A01N25/08 A01N25/12 A01N25/24 A01P21/00 C05F11/10 C05G3/00 C09D191/06

Family:

Publication number	Publication date	Application number	Application date
GB201106761 A0	20110601	GB20110006761	20110420
GB201206968 A0	20120606	GB20120006968	20120419
GB2490247 A1	20121024	GB20120006968	20120419
GB2490247 B2	20151202	GB20120006968	20120419
WO12143683 A2	20121026	WO2012GB00365	20120419
WO12143683 A3	20130606	WO2012GB00365	20120419

Priority:

GB20110006761 20110420

Probable Assignee: EXOSECT LTD**Assignee(s):** (std): EXOSECT LTD ; JESSOP NICHOLAS HUGH HYLTON**Assignee(s):** EXOSECT LIMITED**Inventor(s):** (std): JESSOP NICHOLAS HUGH HYLTON**Inventor(s):** NICHOLAS HUGH HYLTON JESSOP**Agent(s):** WALTHER WOLFF AND CO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

31) Family number: 15893183 (US2003164015A)

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Title: PERMEABLE COMPOSITION, CONTROLLED RELEASE PRODUCT AND METHODS FOR THE PRODUCTION THEREOF

Abstract: A permeable composition, a controlled release product, and methods for producing the permeable composition and controlled release product. The permeable composition includes a matrix material, a particulate filler material, and interfacial passageways between the matrix material and the particles of filler material. The matrix material may include a substrate material and a carrier material. The controlled release product is formed by coating a substrate material with at least one layer of the permeable composition. The methods include the steps of applying a degradable surface treatment material to the particles of filler material and then dispersing the surface treated filler material throughout the matrix material so that degradable interfaces are provided between the matrix material and the particles of filler material.

Classifications:

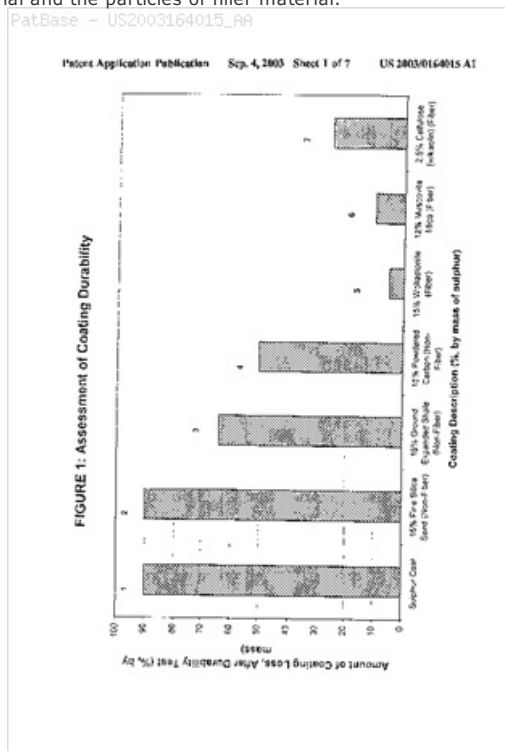
International (ipc 8-9): A01N25/00 A01N25/12 C05D9/00 C05G3/00 C05G3/10 C05G5/00 C09D1/00 (Advanced/Invention); A01N25/00 A01N25/12 C05D9/00 C05G3/00 C05G5/00 (Core/Invention)

International (ipc 1-7): C05D1/00 C05D9/00 C05G3/00 C05G3/10 C05G5/00 C09D1/00

CPC: C05D9/00 C05G3/0023 C05G3/0041 C05G3/0047

European: C05D9/00 C05G3/00B2F C05G3/00B2K C05G3/00B4

US: 424/405 71/31 71/62 71/64.11 71/641.1

**Family:**

Publication number	Publication date	Application number	Application date
AU2001239067 AA	20010917	AU20010239067	20010308
AU2001239067 BB	20051222	AU20010239067	20010308
AU200139067 A1	20010917	AU20010039067	20010308
AU200139067 A5	20010917	AU20010039067D	20010308
CA2300237 AA	20010909	CA20002300237	20000309
CA2402212 AA	20020904	CA20012402212	20010308
CA2402212 C	20070130	CA20012402212	20010308
EP1261567 A2	20021204	EP20010913438	20010308
MXPA02009946 A1	20050908	MX2002PA09946	20010308

NZ521429 A	20040528	NZ20010521429	20010308
US2003164015 AA	20030904	US20020220942	20021210
US2007110783 AA	20070517	US20060616500	20061227
US7189275 BB	20070313	US20010220942	20010308
US7615093 BB	20091110	US20060616500	20061227
WO0166493 A2	20010913	WO2001CA00301	20010308
WO0166493 A3	20020228	WO2001CA00301	20010308

Priority:

CA20002300237 20000309 CA20012402212 20010308 WO2001CA00301 20010308
US20010220942 20010308 US20020220942 20021210 US20060616500 20061227

Probable Assignee: FORDING INC

Assignee(s): (std): BEACHPOINT HOLDINGS INC ; FORDING COAL LTD ; PILDYSH MIKHAIL

Assignee(s): 4123212 CANADA LTD ; BANK OF MONTREAL AGENT AS ; BANK OF MONTREAL AS AGENT ; FORDING COAL LIMITED ; FORDING INC ; NYCO MINERALS INC

Inventor(s): (std): PILDYSH MIKHAIL

Inventor(s): MIKHAIL PILDYSH

Agent(s): MADDERN PTY LTD; MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; EMERY JAMIESON LLP; RODMAN RODMAN; RODMAN AND RODMAN; TERRENCE N; TERRENCE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

32) Family number: 20791202 (GB877955A)

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Title: Granular potassium metaphosphate

Abstract: Potassium metaphosphate (KPO₃)_n is prepared by contacting potassium sulphate with phosphoric acid at a temperature below the fusion point of the product in the presence of a moving mass of inert particles thereby obtaining a granular product. The inert particles are preferably preformed potassium metaphosphate. The reaction is preferably effected at 450-550 DEG C. and the reaction conditions and apparatus are similar to those described in the parent Specification. According to an example, granular metaphosphate was placed in a horizontal cylindrical furnace externally heated to maintain the granules at 500 DEG C. A solution of potassium sulphate and phosphoric acid at 80 DEG C. was sprayed on to the hot bed and after spraying had stopped the bed was maintained at 500 DEG C. to ensure complete reaction.

Classifications:

International (IPC 8-9): B04B11/02 B04B13/00 C01B25/445 C05B13/06 G01F1/38 H01H35/24 H01H35/40 (Advanced/Invention);

B04B11/00 B04B13/00 G01F1/34 H01H35/24 (Core/Invention)

International (IPC 1-7): C01B25/445

CPC: B04B11/02 B04B13/00 C01B25/445 C05B13/06 G01F1/38 H01H35/24 H01H35/40

European: B04B11/02 B04B13/00 C01B25/445 C05B13/06 G01F1/38 H01H35/24 H01H35/40

Family:

Publication number	Publication date	Application number	Application date
DE1118232 B	19611130	DE1960S069975	19600817
GB877955 A	19610920	GB19600012029	19600405

Priority:

GB19600012029 19600405

Probable Assignee: SCOTTISH AGRICULTURAL IND LTD

Assignee(s): (std): SCOTTISH AGRICULTURAL IND LTD

Assignee(s): SCOTTISH AGRICULTURAL INDUSTRIES LIMITED

Inventor(s): (std): RAISTRICK BERNARD ; RAITT JOHN STEWART

33) Family number: 37024206 (GB191302485A)

© PatBase

Title: Improvements in and relating to the Production of Fertilizers.

Abstract: 2485. Marks, E. C. R., [Electric Smelting and Aluminium Co Jan. 30. Compositions containing lime and silicates.- Di-calcium silicate, obtained in the manufacture of manure by heating together material containing tri-calcium phosphate and natural alkaline aluminosilicate, may be utilized in making hydraulic cement, either by adding calcium oxide or calcium carbonate, heating to sintering point and grinding, or by heating to drive off water of hydration and then grinding with wellburnt lime, the product when set corresponding to the formula of tri-calcium silicate.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);

C05B13/00 (Core/Invention)

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB191302485 A	19140129		00000000

Priority:

19130130

Probable Assignee: ELECTRIC SMELTING AND ALUMINIUM CO

Assignee(s): (std): ELECTRIC SMELTING AND ALUMINIUM CO

Assignee(s): EDWARD CHARLES ROBERT MARKS

Inventor(s): EDWARD CHARLES ROBERT MARKS

Title: PREPARATION OF ALKALI CONTAINING CALCINED PHOSPHATE FERTILIZERS

Abstract: In the preparation of alkali-calcium phosphate fertilizers by calcination of rock phosphate, silica, and an alkali metal oxide supplying compound in a rotary kiln, the alkali metal oxide is supplied partly as alkali metal carbonate and partly as concentrated aqueous alkali metal hydroxide solution.

Classifications:

International (IPC 8-9): C01B25/45 C05B13/02 (Advanced/Invention);
C01B25/00 C05B13/00 (Core/Invention)

International (IPC 1-7): C01B C05B13/00 C05B13/02

CPC: C01B25/45 C05B13/02

European: C01B25/45 C05B13/02

US: 71/45 71/47

Family:

Publication number	Publication date	Application number	Application date
BE713006 A	19680731		19680329
DE1294977 B	19690514	DE1967K062041	19670418
DK116601 B	19700126	DK19680001689	19680417
ES351751 A1	19690601	ES19680351751	19680318
FI49821 B	19750630	FI19680000459	19680221
FI49821 C	19751010	FI19680000459	19680221
FR1559414 A	19690307		19680326
GB1159660 A	19690730	GB19680015911	19680402
IL29695 A1	19711020	IL19680029695	19680326
NL6802725 A	19681021	NL19680002725	19680227
NO116002 B	19690113	NO19680001441	19680417
SE332643 B	19710215	SE19680002017	19680215
SU375840 D	19730323	SU19681230301	19680403
US3719464 A	19730306	US19680722189	19680418

Priority:

DE1967K062041 19670418

Probable Assignee: KALI CHEMIE AG

Assignee(s): (std): KALI CHEMIE AG

Assignee(s): KALI CHEMIE AG DT ; KALI CHEMIE AKTIENGESellschaft ; KALI CHEMIE A G

Inventor(s): (std): DAHME ; DAHME W ; DAHME WOLFGANG ; HANS HEINS DR ; HAUSCHILD ULRICH ; HOLST ; HOLST R ; HOLST RUDOLF ; KASPERS ; KASPERS H ; KASPERS HANS HEINZ ; RUDOLF DR ; HAUSCHILD ; HAUSCHILD U ; ULRICH DR ; WOLFGANG DR

Inventor(s): ULRICH HAUSCHILD ; WOLFGANG DAHME ; HAUSCHILD U DT ; RUDOLF HOLST ; RUDOLF HOLST ; KASPERS H DT ; HOLST R DT ; HANS HEINZ KASPERS ; DAHME W DT

Agent(s): REINHOLD COHN AND PARTNERS

Title: Calcium phosphate; magnesium carbonate; double salts.-A mineral phosphate is rendered citrate soluble by roasting say at...

Abstract: Calcium phosphate; magnesium carbonate; double salts.-A mineral phosphate is rendered citrate soluble by roasting say at 800-1300 C. with potassium carbonate obtained from potassium magnesium bicarbonate. Decomposition of the double salt is effected in known manner by warming its aqueous suspension to 80 C. or by treating it at 40 C. with magnesium oxide or hydroxide, the magnesium carbonate thereby recovered being used in the production of further quantities of the double salt. Preferably the finely divided phosphate is admixed with a concentrated, say a 50 per cent, solution of the carbonate to form a paste, which is then roasted. The double salt may be produced by adding magnesium carbonate, it may be in paste form, to a concentrated solution of potassium chloride, and subjecting the mixture to the action of gases containing carbon dioxide, for instance those produced by the roasting operation.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);
C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02 C05B13/06

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB296022 A	19290711	GB19280022332	19280801

Probable Assignee: FRIEDRICH LUDWIG SCHMIDT

Assignee(s): FRIEDRICH LUDWIG SCHMIDT

Title: A process for the production of phosphatic fertilisers

Abstract: Phosphates soluble in citric acid or citrates are obtained by fusing mineral phosphates with soda slags derived from the desulphurization of iron with sodium carbonate. The slag contains about 35 per cent Na₂O, 30--40 per cent SiO₂, and 4--15 per cent sulphur, and a mixture of equal parts of phosphate and slag melts at about 1150 DEG C. Fusion may be

effected in an intermittently or continuously operated rotary furnace, the sulphur content of the slag being eliminated. Tables are furnished showing the solubility of the fusion products of mixtures containing 50, 60 and 70 per cent phosphate and 50, 40, and 30 per cent slag.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);

C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB461869 A	19370225	GB19360023355	19360825

Probable Assignee: ROECHLINGSCHE EISEN AND STAHL

Assignee(s): (std): ROECHLINGSCHE EISEN AND STAHL

Assignee(s): ROECHLING SCHE EISEN U STAHLWERKE GES MIT BESCHRAENKTER HAFTUNG ; ROECHLING SCHE EISEN UND STAHLWERKE GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG

37) Family number: 39345271 (US2011008317A)

© PatBase

Title: CHARCOALS

Abstract: Non-activated charcoals from living plant materials are useful as ion exchange agents for adsorbing cations from an environment, especially metal ions.

Classifications:

International (IPC 8-9): A01K29/00 A61K8/19 A61K8/97 A61Q19/00

B01D15/36 B01J20/04 B01J20/20 B01J20/24 B01J39/02 B01J39/24

B09C1/00 B09C1/08 B09C1/10 B1J20/04 B1J20/24 B9C1/00

B9C1/10 C01B31/02 C01B31/08 C02F1/28 C02F1/42 C05B17/00

C05D9/00 C05F11/00 C05F17/00 C05F9/00 C09K17/02

C10B53/02 (Advanced/Invention);

B01J20/20 (Advanced/Non-invention);

A61K8/96 B01J20/04 B01J20/20 B01J20/22 B01J39/00 B09C1/00 B09C1/10 C01B31/00 C02F1/28 C05D9/00 C05F11/00

C05F17/00 C05F9/00 C09K17/02 C10B53/00 (Core/Invention);

A61K B01J B09C C01B C02F C05D C05F C09K C10B (Subclass/Invention)

CPC: B01J39/02 B01J20/3078 A61K8/0212 B01J20/04 B01J20/20 B01J2220/4843 B09C1/00 C02F1/286 C02F2101/20

C05B13/00 C05F3/00 Y02E50/14 B01J20/0222 B01J20/0259 Y02W30/43 Y02P20/145 B01J39/24 C05B17/00 C09K17/02

B01D15/361 B09C1/08 A61K8/97 A61Q19/00 B01J20/24 C02F1/283 C05F17/0036 C10B53/02 C01B32/05 Y02A40/205

European: A61K8/02F A61K8/97 A61Q19/00 B01J20/04 B01J20/04F B01J20/04H B01J20/20 B01J20/24 B01J39/02 B09C1/00

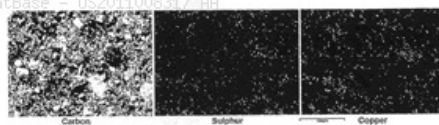
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L01J220/48H8 M02F101/20 Y02E50/14

US: 119/28.5 119/28.500S 210/502.1 210/502.100S 210/681 210/681S 405/128.7 405/128.700S 424/125 424/125P

424/725.1 502/416 502/416S

PatBase - US2011008317-A6



Family:

Publication number	Publication date	Application number	Application date
AU2008281561 AA	20090205	AU20080281561	20080731
AU2008281561 BB	20131017	AU20080281561	20080731
CA2695512 AA	20100202	CA20082695512	20080731
CA2695512 C	20160607	CA20082695512	20080731
EP2187865 A2	20100526	EP20080776103	20080731
GB200715050 A0	20070912	GB20070015050	20070802
GB2451509 A1	20090204	GB20070015050	20070802
GB2451509 B2	20120314	GB20070015050	20070802
NZ583640 A	20111222	NZ20080583640	20080731
US2011008317 AA	20110113	US20080671686	20080731
US2016339419 AA	20161124	US20160164661	20160525
WO09016381 A2	20090205	WO2008GB02612	20080731
WO09016381 A3	20090618	WO2008GB02612	20080731
ZA201001525 A	20120627	ZA20100001525	20100302

Priority:

GB20070015050 20070802

WO2008GB02612 20080731

US20100671686 20100923

US20160164661 20160525

Probable Assignee: FORRESTRY COMMISSION

Assignee(s): (std): DE LEIJ FRANCISCUS ANTONIUS ANNA MARIA ; FORESTRY COMMISSION ; FORESTRY COMMISSION ; FORESTRY COMMISSION THE ; UNIV SURREY ; HUTCHINGS TONY RICHARD ; UNIV OF SURREY ; UNIV SURREY THE ; WINGATE JEREMY ROBERT

Assignee(s): UNIVERSITY OF SURREY THE ; OF SURREY UNIV ; FORRESTRY COMMISSION ; SURREY UNIV ; THE UNIVERSITY OF SURREY ; THE FORESTRY COMMISSION

Inventor(s): (std): DE LEIJ FRANCISCUS ANTONIUS ANNA MARIA ; WINGATE JEREMY ROBERT ; LEIJ FRANCISCUS ANTONIUS ANNA MARIA DE ; HUTCHINGS TONY RICHARD ; DE LEIJ FRANCISCUS ANTONIUS ANNA MARIE ; DE LEIJ FRANCISCUS ANTONIUS AN

Inventor(s): FRANCISCUS ANTONIUS ANNA MARIA DE LEIJ ; JEREMY ROBERT WINGATE ; TONY RICHARD HUTCHINGS

Agent(s): GRIFFITH HACK; MBM INTELLECTUAL PROPERTY LAW LLP; LORD HILTON DAVID; FOLEY AND LARDNER LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: Decomposition of Calcium Nitrate

Abstract: 1,150,538. Nitrogen dioxide; calcium carbonate. SOC. CHIMIQUE DES CHARBONNAGES S.C.C. 11 March, 1968 [13 March, 1967], No. 11814/68. Heading C1A. Nitrogen dioxide and calcium carbonate are prepared by heating calcium nitrate in a stream of carbon dioxide at 440-750° C. The reaction is preferably carried out in the presence of an inert porous carrier which is solid at the temperature employed, e.g. CaCO₃. The calcium nitrate is either sprayed as a solution on to the carrier which is at a temperature between 500° and 600° C. or is mixed with a calcium carbonate carrier at a temperature of 50- 60° C., dehydrated at a temperature of 160° to 250° C. and heated in the presence of carbon dioxide at 500° to 600° C.

Classifications:

International (IPC 8-9): C01B21/26 C01B21/36

C01B21/42 (Advanced/Invention);

C01B21/00 (Core/Invention)

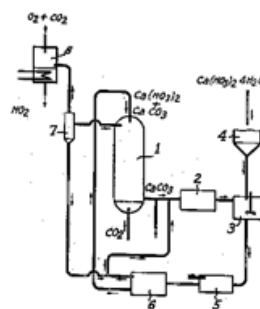
International (IPC 1-7): C01B C01B21/36 C01F11/18 C01F11/36 C05B

CPC: C01B21/26 C01B21/36 C01B21/42

European: C01B21/26 C01B21/36 C01B21/42

PatBase - GB1150538_A

118088 COMPLETE SPECIFICATION
This drawing is a reproduction of the Original as a reduced scale



Family:

Publication number	Publication date	Application number	Application date
BE711668 A	19680715		19680305
DE1667827 A1	19710616	DE19681667827	19680312
ES351459 A1	19690601	ES19680351459	19680309
FR1525157 A	19680517	FR19670098482	19670313
GB1150538 A	19690430	GB19680011814	19680311
NL6803447 A	19680916	NL19680003447	19680311

Priority:

FR19670098482 19670313

Probable Assignee: HOUILLERES BASSIN DU NORD

Assignee(s): (std): CHARBONNAGES S C C SOC CHIMIQUE ; CHARBONNAGES STE CHIMIQUE ; HOUILLERES BASSIN DU NORD ; SO IETE CHIMIQUE DES CHARBONNA

Assignee(s): SOCIETE CHIMIQUE DES CHARBONNAGES ; SOCIETE CHIMIQUE DES CHARBONNAGES S C C ; HOUILLERES DU BASSIN DU NORD ET DU PASDE CALAIS ; CHIMIQUE DES CHARBONNAGES S C C SOC ; CHIMIQUE DES CHARBONNAGES SOC

Inventor(s): (std): COPIN ROBERT ; DELASSUS MARCEL ; HOFMAN THEOPHILE ; HOFMAN THEOPHILE ; SIN ROBERT ; SINN ROBERT

Inventor(s): THEOPHILE HOFMAN ; MARCEL DELASSUS ; ROBERT COPIN ; ROBERT SIN

Title: Improvements in the manufacture and production of fertilisers

Abstract: A carbonaceous fertilizer is prepared by treating a mixture of crude phosphate and solid carbonaceous substances of vegetable origin, in the presence of small quantities of water, with gases comprising oxides or hydrated oxides of nitrogen of at least the tetroxide stage, and then neutralizing the resulting mass with p basic substances. The carbonaceous substances referred to are coal, lignites, peat, lignin and wood in the form of saw-dust. The gaseous oxides of nitrogen and c., referred to are nitrogen tetroxide which may be employed in the nascent state by using a mixture of nitric oxide and oxygen, e.g. ammonia combustion gases, nitric acid, and gases obtained by decomposing nitrosyl chloride with oxygen. The neutralization may be effected with gaseous, liquid or aqueous ammonia, ammonium salts such as the carbonate or bicarbonate, potassium, sodium or calcium carbonate, and lime. Further fertilizing substances such as potassium compounds with or without inorganic adsorbents, e.g. silica gel, alumina gel, zeolites, blast furnace slags or slags from the electrothermic manufacture of phosphorus may be added before, during or after the treatment with oxides of nitrogen or the like. If necessary, the phosphate may be pretreated with a little mineral acid in order to decompose fluorine compounds. The Provisional Specification is not restricted to the employment of the nitrogen oxides and c., in the gaseous form.

Classifications:

International (IPC 8-9): C05B11/06 C05F11/02 (Advanced/Invention)

International (IPC 1-7): C05F11/02

CPC: C05B11/06 C05F11/02

European: C05B11/06 C05F11/02

Family:

Publication number	Publication date	Application number	Application date
GB424260 A	19350218	GB19330020161	19330717

Priority:

GB19330020161 19330717

Probable Assignee: IG FARBENINDUSTRIE AG

Assignee(s): (std): IG FARBENINDUSTRIE AG

Assignee(s): I G FARBENINDUSTRIE AKTIENGESELLSCHAFT

40) Family number: 31000311 (US2004250581A)

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Title: PROCESS FOR THE PRODUCTION OF A PLANT GROWTH STIMULATOR FROM FLY ASH

Abstract: The invention relates to a process for the production of plant growth stimulator from fly ash, comprising treating fly ash with effluent NOx gases in a reactor under agitation at a temperature in the range of 60 to 100 degree celsius, for a time period in the range of 2 to 5 hours and treating the resulting material with effluent ammonia gas in the same reactor under ambient conditions for time period in the range of 20 to 50 minutes.

Classifications:

International (IPC 8-9): B01D53/56 C05D3/04 C05D9/00 C05F11/00 C05F7/00 C05F9/00 (Advanced/Invention);

B01D53/56 C05D3/00 C05D9/00 C05F11/00 C05F7/00 C05F9/00 (Core/Invention)

International (IPC 1-7): B01D53/56 C05D9/00 C05F7/00 C05F9/00

CPC: B01D53/565 C05D3/04 Y02A40/214 C05D9/00

European: B01D53/56D C05D3/04 C05D9/00

US: 504/113 71/25 71/47 71/49

Family:

Publication number	Publication date	Application number	Application date
AP200503394 A0	20050930	AP20050003394	20030320
AP2976 A	20140930	AP20050003394	20030320
AU2003217440 AA	20041011	AU20030217440	20030320
AU2003217440 BB	20090827	AU20030217440	20030320
DE60328418 D1	20090827	DE20036028418	20030320
EP1613568 A1	20060111	EP20030712626	20030320
EP1613568 B1	20090715	EP20030712626	20030320
KR100837827 B1	20080613	KR20057017592	20030320
KR20050111783 A	20051128	KR20057017592	20030320
MXPA05010014 A1	20051214	MX2005PA10014	20030320
US2004250581 AA	20041216	US20040795576	20040308
US7291199 BB	20071106	US20040795576	20040308
WO04083151 A1	20040930	WO2003IN00063	20030320

Priority:

WO2003IN00063 20030320

US20040795576 20040308

KR20050017592 20050920

KR20057017592 20050920

WO2003IN00063 20050920

Probable Assignee: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Assignee(s): (std): COUNCIL SCIENT IND RES ; GHOSH SWAPAN KUMAR ; HAZRA SUSHANTA KUMAR ; RAO SUKURU RAMAKRISHNA ; SINGH GULAB ; COUNCIL OF SCIENT AND

Assignee(s): COUNCIL OF SCIENTIFIC AND ; COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Inventor(s): (std): HAZRA SUSHANTA KUMAR ; RAO SUKURU RAMAKRISHNA ; SINGH GULAB ; GHOSH SWAPAN KUMAR ; SUKURU RAMAKRISHNA RAO ; SUSHANTA KUMAR HAZRA ; SWAPAN KUMAR GHOSH

Inventor(s): GULAB SINGH ; SINGH GULAB FLY ASH UTILISATION PROGRAMME TIFAC

Agent(s): SPRUSON AND FERGUSON; CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; MAIWALD WALTER; LADAS AND PARRY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

41) Family number: 2795328 (DD233807A)

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Title: VERFAHREN ZUR HERSTELLUNG VON KRISTALLINEM, FASERIGEN CALCIUMPOLYPHOSPHAT PROCESS FOR THE PRODUCTION OF CRYSTALLINE, FIBROUS CALCIUMPOLYPHOSPHAT (Machine translation)

Abstract: Source: DD233807A [DE] [Source: Claim 1] 1. Verfahren zur Herstellung von kristallinem faserigen Calciumpolyphosphat, dadurch gekennzeichnet, dass Mischungen von Calcium- und Ammoniumphosphat bzw. entsprechende Bildungsgemische zunächst weitgehend entwaessert, danach bei 930-980 degrees centigrade aufgeschmolzen werden, die resultierende Schmelze in auf 700-850 degrees centigrade temperierte Kristallisierbehälter abgelassen wird, und die nach Animpfen aus der Schmelze auskristallisierten beta-Calciumammoniumpolyphosphat-Einkristalle durch Auflösen der Calciumammoniumpolyphosphat-Matrix mit Wasser abgetrennt werden.

Machine translation: [Source: claim 1] 1 procedure for the production of crystalline fibrous Calciumpolyphosphat, characterized that mixtures of calcium and ammonium phosphate or corresponding education mixtures are initially largely drained, melted then at 930-980 degrees centigrade, the resulting melt in centigrade degrees on 700-850 tempered crystallizing tank is drained, and the beta-Calciumammoniumpolyphosphat single crystals crystallized after inoculation from the melt by dissolving the Calciumammoniumpolyphosphat matrix with water can be separated.

Classifications:

International (IPC 8-9): C01B25/32 C01B25/40 (Advanced/Invention);

C01B25/00 (Core/Invention)

International (IPC 1-7): C01B25/32 C01B25/40

Family:

Publication number	Publication date	Application number	Application date
DD233807 A1	19860312	DD19820242540	19820816

Priority:

DD19820242540 19820816

Probable Assignee: PIESTERITZ STICKSTOFF

Assignee(s): (std): PIESTERITZ STICKSTOFF

Assignee(s): VEB STICKSTOFFWERK PIESTERITZ DD

Inventor(s): (std): ARNDT LEONORE ; HERRMANN FRIEDRICH ; OERTEL MANFRED ; RICHTER HERFRIED ; SCHUELKE ULRICH

Inventor(s): SCHUELKE ULRICH DD ; RICHTER HERFRIED DD ; OERTEL MANFRED DD ; HERRMANN FRIEDRICH DD ; ARNDT LEONORE DD

42) Family number: 1558329 (FR2388764A)

© PatBase

Title: PROCESSING WASTE GAS AND SLUDGE FROM PHOSPHORUS MFR. - BY TREATMENT WITH AQ. COPPER SULPHATE SOLN., GIVING PRODS. USEFUL IN METALLURGY AND FERTILISER MFR. (NL 27.10.78)

Abstract: Processing of waste materials, e.g. sludge and waste gas from P mfr. is carried out by treatment with an aq. CuSO_4 soln. and sepn. and utilisation of the solid and liquid prods. formed. The solid contains mainly Cu phosphide, together with alkali metal and Si fluorides and chlorides and Ca and Al silicates, whilst the liquid contains H_3PO_4 , H_2SO_4 and CuSO_4 . The solid is specified for use as modifier and refiner in hypereutectic silumins in an amt. of 0.4-0.8 weight percent and for the prodn. of a Cu-P alloy by melting in inert medium at 1050-1150 degrees C, and the liquid for the prodn. of a K-P fertiliser contg. Cu by mixing with other waste prods. from the process e.g. the Cottrell dust and phosphorite fines. This fertiliser is esp. valuable for plants grown on peat soils. The vireous slag contg. metal fluorosilicates formed from the solid in the metallurgical processes is useful as flux in soldering and melting of non-ferrous metals. All waste prods. are processed simultaneously to useful prods. and protection of the environment is improved, since no sec. waste prods. are formed. The process is very economical since it does not require large amts. of energy, expensive reagents or special equipment.

Classifications:

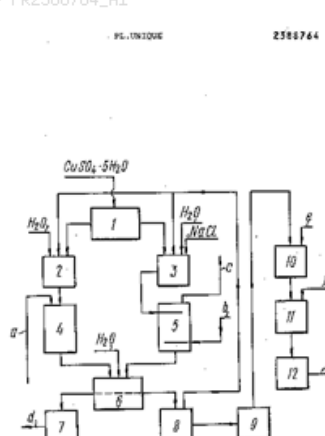
International (ipc 8-9): B01D53/34 B01D53/46 C01B25/01 C01B25/02 C01B25/08 C01D3/02 C01G3/00 C02F1/52 C02F1/58 C02F11/18 C05B17/00 C05B17/02 C05D9/02 C05G1/00 C22C1/02 C22C1/06 C22C21/04 C22C9/00 (Advanced/Invention); C05D9/02 (Advanced/Non-invention); B01D53/34 B01D53/46 C01B25/00 C02F1/52 C02F1/58 C02F11/18 C05B17/00 C05D9/00 C05G1/00 C22C1/00 C22C1/02 C22C21/02 C22C9/00 (Core/Invention); C05D9/00 (Core/Non-invention)

International (ipc 1-7): B01D53/00 B01D53/34 C01B25/01 C01B25/02 C01B25/027 C01B25/08 C01B25/18 C01D3/02 C01G3/00 C05B17/02 C05D9/02 C05G1/00 C05G1/04 C22C1/02 C22C1/06 C22C21/02 C22C9/00

CPC: B01D53/34 C02F1/5236 C02F1/583 C02F11/18 C05B17/00 C22C9/00 C22C21/04

European: B01D53/34 C02F1/52F C02F1/58F C02F11/18 C05B17/00 C22C21/04 C22C9/00

PatBase - FR2388764_A1



Family:

Publication number	Publication date	Application number	Application date
CA1132335 A1	19820928	CA19780301553	19780420
DD136823 Z	19790801	DD19780204954	19780421
DE2818113 A1	19781102	DE19782818113	19780425
DE2818113 B2	19800821	DE19782818113	19780425
DE2818113 C3	19811119	DE19782818113	19780425
FR2388764 A1	19781124	FR19780012040	19780424
FR2388764 B1	19820618	FR19780012040	19780424
JP1138982 C3	19830311	JP19780047922	19780424
JP54001295 A2	19790108	JP19780047922	19780424
JP57032092 B4	19820708	JP19780047922	19780424
NL173510 B	19830901	NL19780004415	19780425
NL173510 C	19840201	NL19780004415	19780425
NL7804415 A	19781027	NL19780004415	19780425
SU668963 T	19790625	SU19772478702	19770425
SU687853 A1	19810107	SU19772499091	19770620
SU687853 T	19810107	SU19772499091	19770620
SU726071 T	19800405	SU19782583360	19780309

Priority:

SU19772478702 19770425

SU19772499091 19770620

SU19782583360 19780309

CA19780301553 19780420

Probable Assignee: INST MATERIALOVEDENIYA AN UK S

Assignee(s): (std): INST LITYA AN UK SSR ; INST LITYA AN USSR ; INST MATERIALOVEDENI ; INST MATERIALOVEDENIA AKAD NAU ; INST PROBLEM MATERIALOVEDENIA ; INST MATERIALOVEDENIYA AN UK S ; INST MATERIALOVEDENIYA AN USSR ; INST PUROBUREMU MATERIAROBEDEN ; CHIMKENTSKOE PROIZV OB FOSFOR ; INST MATERIALOVEDENIJA AKADEMI ; INST MATERIALOVEDENIA AKADEMII ; OF CASTING PROBLEMS ACADEMY OF SCIENCES OF UKRAINIAN SSR INST

Assignee(s): PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKOI SSR UL INST ; INSTITUT PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKOI SSR UL ; INSTITUT PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKOI SSR SU ; INSTITUT PROBLEM MATERIALOVEDENIJA AKADEMII NAUK UKRAINSKOJ SSR ; INSTITUT PROBLEM MATERIALOVEDENIJA AKADEMII NAUK UKRAINSKOJ SSR KIEW SOWJETUNION ; INSTITUT PROBLEM MATERIALOVEDENIJA AKADEMII NAUK UKRAINSKOJ SSR KIEW SU ; INSTITUT PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKOI SSR TE KIEW U S S R ; INSTITUT PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKSSR TE KIEW U S S R ; ISHKHANOV EVGENY S ; KIPCHAKBAEV ALEXANDR D ; SAPIAN VLADIMIR G ; POBORTSEV MENDEL E ; KOVERYA VLADIMIR M ; PROBLEM MATERIALOVEDENIA AKADEMII NAUK UKRAINSKOI SSR INST ; SERGIENKO VLADIMIR Y ; MARKOVSKY EVGENY A ; MUCHNIK SIMON V ; VOPILOV ALEXANDR N ; LYNCHAK KIMA A ; PROBLEM MATERIALOVEDENI INST ; INST PROBLEM MATERIALOVEDENIYA AN UK SSR ; INST PROBLEM LITYA AN UK SSR ; INST PROBLEM MATERIALOVEDENIYA AN USSR ; DMITRENKO VALENTINA V ; ALZHANOV TLEUBAI M ; BYKOV VLADIMIR I ; CHERNOGORENKO VASILY B ; INSTITUT PROBLEM MATERIALOVEDENI

Inventor(s): (std): ALSANOV TLEUBAJ M ; ALSCHANOV TLEUBAJ M ; ALZHANOV T M ; ALZHANOV TLEUBAI M ; BURADEMIRU YAKOBUREBUICHI ; BYKOV VLADIMIR I ; BYKOV VLADIMIR IVANOVICH ; CERNOGORENKO VASILIJ B ; CHERNOGORENKO V B ; CHERNOGORENKO VASILY B ; DMITRENKO VALENTINA VASILIEVNA ; ISCHANOV EVGENIJ S ; ISCHCHANOV EVGENIJ S ; ISHKHANOV E S ; DMITRENKO VALENTINA V ; ISHKHANOV EVGENY S ; KIMA ANATORIEBUNA RIINCHIAKU ; KIPCAKBAEV ALEKSANDR D ; KIPCHAKBAEV ALEXANDR D ; KIPCHAKBAEV ALEXANDR DZHARASOV ; KIPTSCHAKBAEV ALEKSANDR D ; KIPTSCHAKVAEV ALEKSANDR D ; KOVERJA VLADIMIR M ; KOVERYA VLADIMIR M ; KOVERYA VLADIMIR MIKHAILOVICH ; LYNCAK KIMA A ; LYNCHAK K A ; LYNCHAK KIMA A ; LYNCHAK KIMA A ; MARKOVSKIY EVGENIJ A ; MARKOVSKIY E A ; MARKOVSKIY EVGENIJ A ; MARKOVSKIY EVGENY A ; MARKOVSKIY EVGENY ADAMOVICH ; MUCHNIK SIMON V ; MUCHNIK SIMON V ; MUTSCHNIK SIMON V ; POBORCEV MENDEL E ; POBORTSEV M E ; POBORTSEV MENDEL E ; POBORTSEV MENDEL ELIEVICH ; SAPIAN VLADIMIR G ; SAPIAN VLADIMIR GRIGORIEVICH ; SAPIAN V G ; SERGIENKO V YA ; SERGIENKO VLADIMIR J ; SERGIENKO VLADIMIR Y ; SERGIENKO VLADIMIR YAKOVLEVICH ; TSCHERNOGORENKO VASILIJ B ; VOPILOV ALEKSANDR N ; VOPILOV ALEXANDR N ; VOPILOV ALEXANDR NIKOLAEVICH ; TOREUBAI MUKANOBUICHI ARUJIANO ; SHIMON BUORUFUOBUICHI MUCHINIK ; SERGIENKO VLADIMIR YA ; KIPCHAKBAEV ALEKSANDR D ; ISHKHANOV EVGENIJ S ; EBUGENII SERUGEEBUICHI ISHIKUH ; BUASHIRII BONIFUACHIEBUICHI CH ; ALZHANOV TLEUBAJ M ; SAPIAN VLADIMIR G ; CHERNOGORENKO VASILIJ B

Inventor(s): MUCHNIK SIMON V SU ; LYNCHAK KIMA A SU ; CHERNOGORENKO VASILIJ B SU ; SERGIENKO V YA SU ; SAPIAN V G SU ; POBORTSEV M E SU ; MARKOVSKIY E A SU ; LYNCHAK K A SU ; ISHKHANOV E S SU ; CHERNOGORENKO V B SU ; ALZHANOV T M SU ; SAPIAN VLADIMIR G SU ; VOPILOV ALEXANDR N SU ; VOPILOV ALEKSANDR N SU ; V DMITRENKO VALENTINA ; V MUTSCHNIK SIMON ; VLADIMIR YAKOVLEVICH SERGIENKO VLADIMIR GRIGORIEVI ; VLADIMIR YAKOVLEVICH SERGIENKO VLADIMIR GRIGORIEVICH SAPIAN VLADIMIR MIKHAILOVICH KOVERYA MENDEL ELIEVICH POBORTSEV EVGENY ADAMOVICH MARKOVSKY VALENTINA VASILIEVNA DMITRENKO VLADIMIR IVANOVICH BYKOV ALEXANDR DZHARASOVICH KIPCHAKBAEV ET ALEXANDR... ; SERGIENKO VLADIMIR Y SU ; SERGIENKO VLADIMIR YA SU ; SAPIAN VLADIMIR G SU ; SAPIAN VLADIMIR G VASILKOV KIEVSKAJY OBLAST SU ; S ISCHCHANOV EVGENIJ ; POBORTSEV MENDEL E SU ; N VOPILOV ALEKSANDR ; MARKOVSKY EVGENY A SU ; M ALSCHANOV TLEUBAJ ; M KOVERJA VLADIMIR ; KOVERYA VLADIMIR M SU ; KIPCHAKBAEV ALEXANDR D SU ; KIPCHAKBAEV ALEKSANDR D SU ; ISHKHANOV EVGENY S SU ; J SERGIENKO VLADIMIR ; DMITRENKO VALENTINA V SU ; ISHKHANOV EVGENIJ S SU ; E POBORCEV MENDEL ; G SAPIAN VLADIMIR ; I BYKOV VLADIMIR ; CHERNOGORENKO VASILY B SU ; D KIPTSCHAKVAEV ALEKSANDR ; BYKOV VLADIMIR I SU ; A LYNCHAK KIMA ; A MARKOVSKIY EVGENIJ ; ALZHANOV TLEUBAI M SU ; ALZHANOV TLEUBAJ M SU ; B TSCHERNOGORENKO VASILIJ

Agent(s): SWABEY OGILVY RENAULT

43) Family number: 1594335 (DD151300A)

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Title: VERFAHREN ZUR HERSTELLUNG EINES GRANULIERTEN,MANGANHALTIGEN SUPERPHOSPHATES METHOD OF MAKING A GRANULATED, MANGANHALTIGEN SUPERPHOSPHATES (Machine translation)

Abstract: Source: DD151300A [DE] [Source: Claim 1] 1. Verfahren zur Herstellung eines granulierten, man- ganhaltigen Superphosphates aus gereiftem Superphos- phat und einem Manganoxidstaub, der in stark redu- zierendem Milieu eines Elektroofens als ein Mangan(II) oxid gebildet wurde, gekennzeichnet dadurch, dass in einem, einstufigen Granulationsverfahren infolge der unterschiedlichen partiellen Granulationsgeschwindig- keiten der Ausgangskomponenten Zweischichtgranalien hergestellt werden.

Machine translation: [Source: claim 1] 1 processes for the production of granulated, one ganhaltigen Superphosphates from matured Superphos- phat and one ganhaltigen oxide dust, oxide formed in greatly reduce features milieu of oven as a Mangan(ii), characterized by the fact that ties of the Zweischichtgranalien output components manufactured in one, single- stage granulation process as a result of the different partial Granulationsgeschwindig-.

Classifications:
International (IPC 8-9): C05B19/02 (Advanced/Invention);
C05D9/02 (Advanced/Non-invention);
C05B19/00 (Core/Invention);
C05D9/00 (Core/Non-invention)
International (IPC 1-7): C05B19/02 C05D9/02

Family:

Publication number	Publication date	Application number	Application date
DD151300 A1	19811014	DD19800221745	19800611

Priority:
DD19800221745 19800611

Probable Assignee: BAIER DIETER

Assignee(s): (std): BAIER DIETER ; BERGMANN WERNER ; GISBIER JUERGEN ; SCHMUTTERER JOHANNES
Assignee(s): SCHMUTTERER JOHANNES DD ; GISBIER JUERGEN DD ; BERGMANN WERNER DD ; BAIER DIETER DD
Inventor(s): (std): BAIER DIETER ; BERGMANN WERNER ; GISBIER JUERGEN ; SCHMUTTERER JOHANNES
Inventor(s): SCHMUTTERER JOHANNES DD ; GISBIER JUERGEN DD ; BERGMANN WERNER DD ; BAIER DIETER DD

Title: APERFEICOAMENTO EM PROCESSO DE FABRICACAO DE FERTILIZANTE POTASSICO PROGRESS IN THE PROCESS OF MANUFACTURING FERTILIZER POTASSICO (Machine translation)

Abstract: Source: BRPI8604838A [PT] | •»..S'T /• •• RESUMO Patente de Invencaoss "APERFEICOAMENTO EM PROCESSO DE FA- BRICACAO DE FERTILIZANTE POTASSIGO". Refere-se a presente Invencao a un pro 5 cesso para fabricacao de kalsilita, que e um fertilizan- te potassico assimilavel pela planta e obtido a partir de rochas alcalinas, sendo a energia de reacao fornecida pela queima de carvao vegetal e/ou mineral, o que resul- ta em um menor tempo de reacao e consequentemente oti- 10 za a sua producao. O presente processo compreende as se- guintes etapas: a - mistura de rocha alcalina (1), car vao vegetal e/ou mineral (2), aloalle (7) e vinhoto (6) 15 com reducao a granulos; b - secagem (8); c - calei nacao em forno (9) a tempera tura de 500-1100 degrees centigrade com tempo de permanencia de 5-30 minu tos; 20 d - resfriamento (10), com recircula cao de ar quente (11) para a secagem (8); e - moagem (12) j f - tratamento em tanque (13) com adi cao de and gua ou solucao alcalina (21) para dissolucao dos 25 silicates e aluminatos que sao separados no filtro (14), sendo a fase liquida recuperada no tanque (16) com adi- cao de cal (17) para precipitacao da silicato de calcio (19) e os alcalis em solucao concentrados (20) e recicla dos, enquanto a fase solida no filtro (14) S a kalsilita 30 obtida.

Machine translation: | •».. S't/• • • Invention patent SUMMARY ss "WHILE in the PROCESS OF FA-BRICACAO POTASSIGO FERTILIZER". Refers to the present Invention a un pro cess 5 for manufacturing of kalsilita, and a fertilizan you potassico assimilavel by the plant and obtained from the alkaline rocks, being the reaction energy provided by the burning of coal and/or mineral, which resul-ta in a minor reaction time and consequently optimised its production za 10. this process comprises the following steps ss-if-alkaline rock mix (1), car plant and/or mineral vain (2), aloalle (7) and factories (6) decrease the granules with 15; (b)-drying (8); c-calei nation in oven (9) the tempera ture of 500-1100 degrees centigrade with time of stay of 5-30 minu tos; 20 d-cooling (10), with recirculating hot air dog (11) for drying (8); and-grinding (12) j f-treatment in tank (13) with ADI cao and water or alkaline solution (21) to break-up of the 25 silicates and aluminates are separated in the filter (14), being the liquid phase recovered at the tank (16) with adi-caio of cal (17) for precipitacao of calcium silicate (19) and the alkalis in solution (20) concentrates and recycles the, while the solid phase in the filter (14) S kalsilita 30.

Classifications:

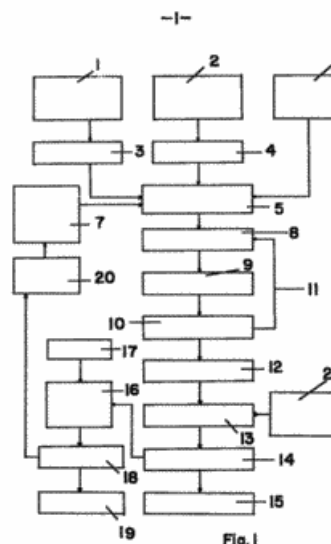
International (IPC 8-9): C05D1/00 (Advanced/Invention);

C05D1/00 (Core/Invention)

International (IPC 1-7): C05D1/00

PatBase - BRPI8604838_A

38604838



Family:

Publication number	Publication date	Application number	Application date
BRPI8604838 A	19880531	BR1986PI04838	19861006

Priority:

BR1986PI04838 19861006

Probable Assignee:

KENKICHI FUJIMORI

Assignee(s): (std):

KENKICHI FUJIMORI

Inventor(s): (std):

FUJIMORI KENKICHI

Inventor(s):

KENKICHI FUJIMORI

Title: Improvements in or relating to Fertilisers.

Abstract: 113,493. Borghesani, G. A. R., and Stampa, G. Feb. 27, 1917. Manures.-A manure in which the phosphate and potash are soluble in citric acid is obtained by heating together to a high temperature a mixture of phosphate rock and potash bearing rock such as leucite together with a small proportion of nitre cake, and if desired pyrites ash. The reaction mixture is fused, a temperature of 1200- 1400 C. being mentioned, which may be obtained by means of an electric furnace. The fused mass discharged from the furnace may be cooled by sprinkling water upon it in such quantity as will evaporate, leaving a dry product.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02
European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB113493 A	19180227	GB19170002924	19170227

Priority:

GB19170002924 19170227

Probable Assignee: BORGHESANI GUIDO ARMANDO RENAT

Assignee(s): (std): BORGHESANI GUIDO ARMANDO RENAT ; STAMPA GIUSEPPE

Assignee(s): BORGHESANI GUIDO ARMANDO RENAT STAMPA ; GIUSEPPE STAMPA ; GUIDO ARMANDO RENATO BORGHESANI

Inventor(s): (std): BORGHESANI GUIDO ARMANDO RENAT ; STAMPA GIUSEPPE

Inventor(s): GIUSEPPE STAMPA ; GUIDO ARMANDO RENATO BORGHESANI

46) Family number: 24940352 (GB125718A)

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Title: Improvements in and relating to the Production of Fertilisers.

Abstract: 125,718. Marks, E. C. R., (Soc. Anon. Italiana G. Ansaldo and Co.). April 16, 1918. Potassium compounds.-A fertilizer containing potassium compounds and also phosphorus compounds, soluble in, for example, ammonium citrate, is prepared by heating to incipient fusion a mixture of potash containing minerals such as feldspar, kaolin, silicates, and c., phosphate-containing substances such as mineral tricalcium phosphate, and silica.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB125718 A	19190416	GB19180006445	19180416

Priority:

GB19180006445 19180416

Probable Assignee: S A ITALIANO GIO ANSALDO AND CO

Assignee(s): (std): S A ITALIANO GIO ANSALDO AND CO

Assignee(s): EDWARD CHARLES ROBERT MARKS ; MARKS EDWARD CHARLES ROBERT

Inventor(s): EDWARD CHARLES ROBERT MARKS ; MARKS EDWARD CHARLES ROBERT

47) Family number: 31552373 (US2007095119A)

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Title: PROCESS FOR THE MANUFACTURE OF A BIO-RELEASE FERTILISER OF AN ANIONIC MICRO NUTRIENT VIZ MOLIBDENUM

Abstract: This invention describes a process for the preparation of bio-release molybdenum fertilizers which comprises heating molybdenum trioxide, one or more basic compound(s) of metal(s) selected from magnesium, calcium and sodium, and phosphoric acid till a solid polyphosphate is obtained and finally obtaining the dried powder.

Classifications:

International (IPC 8-9): C01B25/40 C05B13/04 C05D9/00 (Advanced/Invention);

C01B25/00 C05B13/00 C05D9/00 (Core/Invention)

International (IPC 1-7): C05B13/06 C05C3/00 C05D9/02 C05G3/00

CPC: C05B13/04

European: C05B13/04

US: 423/306 71/31 71/31P 71/33 71/41

Family:

Publication number	Publication date	Application number	Application date
IN00970DE2003 A	20080725	IN2003DE00970	20030806
US2007095119 AA	20070503	US20040567425	20040806
US7670405 BB	20100302	US20040567425	20040806
WO05014506 A2	20050217	WO2004IN00235	20040806
WO05014506 A3	20050324	WO2004IN00235	20040806

Priority:

IN2003DE00970 20030806 WO2004IN00235 20040806

Probable Assignee: AGTEC INNOVATIONS INC

Assignee(s): (std): DEPT OF SCIENCE AND TECHNOLOGY D ; VARADACHARI CHANDRIKA

Assignee(s): RAMAN CENTRE FOR APPLIED AND INTERDISCIPLINARY SCIENCES ; AGTEC INNOVATIONS INC ; DEPARTMENT OF SCIENCE AND TECHNOLOGY ; DEPARTMENT OF SCIENCE AND TECHNOLOGY (DST) ; DEPARTMENT OF SCIENCE AND TECHNOLOGY DST ; DEPARTMENT OF SCIENCE AND TECHNOLOGY

Inventor(s): (std): VARADACHARI CHANDRIKA

Inventor(s): DR MS CHANDRIKA VARADACHARI

Agent(s): VOLPE AND KOENIG PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG

48) Family number: 1207379 (US4105594A)

© PatBase

Title: HIGHLY FILLED POLYUREA FOAMS

Abstract: The instant invention relates to hydrophobic inorganic-organic lightweight foams produced from aqueous suspensions of finely divided water-insoluble inorganic materials and polyisocyanates. More particularly, the invention relates to a process for the production of highly filled, hydrophobic, lightweight polyurea foams comprising reacting (a) liquid, water insoluble polyisocyanates free from ionic groups, having viscosities of more than 200 cP at 25 degrees C. and having isocyanate functionalities of greater than 2.1, with (b) an aqueous suspension of inorganic filler, said suspension having a solids content of from 30 to 80 percent by weight and having a pH value of above 8, at least 50 percent by weight of the suspended fillers having a particle size of less than 50 microns, (c) in the presence of the foam stabilizer of the polyether/polysiloxane type and in the presence of a tertiary amine catalyst, The weight ratio of components (b) to component (a) being better 1:2 and 6:1.

Classifications:

International (ipc 8-9): C08G18/06 C08G18/18 C08G18/72
C08J9/00 C08J9/02 C08J9/30 (Advanced/Invention);
C08J9/00 (Core/Invention)

International (ipc 1-7): C08G18/00 C08G18/10 C08G18/14
C08G18/18 C08G18/32 C08G18/72 C08J9/02 C08J9/04 C08J9/30
C08K3/00 C08K3/36 C08L75/02 C08L75/04 C08L75/06 C09D3/49
C09D5/00

CPC: Y10S521/905 C08J9/0066 C08J2375/02 C08K5/09 C08K5/52
C08L75/02 C08L83/04 C08L101/00

European: C08J9/00M M08J375/02

US: 521/100 521/102 521/106 521/109.1 521/112 521/122 521/159
521/161 521/162 521/905

PatBase - SU593671_0

21

593671

22

Table 1

Sample	Inventive Example					Comparative Example					Inventive Example					Comparative Example				
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14	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20		

Family:

Publication number	Publication date	Application number	Application date
AT353016 B	19791025	AT19760003910	19760528
AT391076 A	19790315	AT19760003910	19760528
AU197614436 A1	19771208	AU19760014436	19760531
BE842372 A	19761201	BE19760167457	19760531
BR7603471 A	19770104	BR19760003471	19760531
CA1063299 A1	19790925	CA19760252412	19760513
CH620939 A	19801231	CH19760006598	19760525
DD130153 C	19780308	DD19760193075	19760528
DE2524191 A1	19761216	DE19752524191	19750531
DE2524191 B2	19790802	DE19752524191	19750531
DE2524191 C3	19800403	DE19752524191	19750531
DK235676 A	19761201	DK19760002356	19760528
ES448294 A1	19770716	ES19760448294	19760528
FR2313409 A1	19761231	FR19760016394	19760531
FR2313409 B1	19800912	FR19760016394	19760531
GB1488803 A	19771012	GB19760022045	19760527
IT1061328 A	19830228	IT19760049731	19760531
JP1060237 C3	19810825	JP19760062459	19760531
JP51147563 A2	19761217	JP19760062459	19760531
JP56005779 B4	19810206	JP19760062459	19760531
LU75044 A	19770215	LU19760075044	19760528
NL7605791 A	19761202	NL19760005791	19760528
NO761732 A	19761201	NO19760001732	19760521
NO761732 L	19761201	NO19760001732	19760521
PL101872 B1	19790228	PL19760189959	19760529
SE7605930 A	19761201	SE19760005930D	19760525
SE7605930 L	19761201	SE19760005930	19760525
SU593671 A3	19780215	SU19762363998	19760531
SU593671 D	19780215	SU19762363998	19760531
US4105594 A	19780808	US19760687579	19760518

Priority:

DE19752524191 19750531

Inventor(s): PETER MARKUSCH ; PETER MARKUSH DT ; MARKUSCH PETER DE ; DITER DITERIKH DT ; DIETERICH
DIETER DE ; DIETER DEITERICH ; DIETER DIETERICH

49) Family number: 34143389 (EP1923377A2)

Title: A PROCESS FOR PRODUCING A FERTILISER

Abstract: The present invention relates to a process for producing a fertiliser from a mix comprising at least one source of activated calcium oxide and organic waste. The organic waste has a dry matter content of greater than 65 percent and comprises greater than 70 percent by weight of the mix. The organic waste could be any of meat and bone meal (MBM), green waste, poultry waste or mushroom waste. The invention further relates to the fertiliser produced.

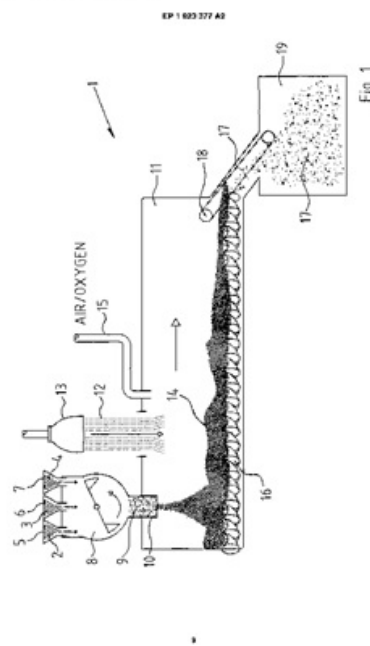
Classifications:

International (IPC 8-9): C05D3/00 C05D3/02 C05D3/04 C05F1/00 C05F11/00 C05F3/00 C05G1/00 (Advanced/Invention); C05D3/00 C05F1/00 C05F3/00 C05G1/00 (Core/Invention)

CPC: C05D9/00 C05D3/04 C05F11/00 Y02P20/145 C05F3/00
C05D3/02 C05F1/005 Y02A40/203 Y02A40/205

European: C05D3/02 C05D3/04 C05D9/00 C05F1/00D C05F11/00
C05F3/00

PatBase - EP1923377_A2



Family:

Publication number	Publication date	Application number	Application date
EP1923377 A2	20080521	EP20070121040	20071119
GB200622961 A0	20061227	GB20060022961	20061117
GB2443817 A1	20080521	GB20060022961	20061117
IE20070840 A1	20080528	IE20070000840	20071119
IE20070841 A2	20080528	IE20070000841	20071119

Priority:

GB20060022961 20061117 IE20060000836 20061117 IE20070000840 20071119
IE20070000841 20071119

Probable Assignee: KEEFFE NIALLO

Assignee(s): (std): KEEFFE NIAL O ; MACDONALD MICHAEL ; O KEEFFE NIAL

Assignee(s): MICHAEL MACDONALD ; NIAL O KEEFFE

Inventor(s): (std): MACDONALD MICHAEL ; O KEEFFE NIAL

Inventor(s): NIAL O KEEFFE ; MICHAEL MACDONALD

Agent(s): BRENNAN EIMER MARY ET AL

Designated states: AL AT BA 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 PL PT
RO RS SE SI SK TR

50) Family number: 19103402 (GB559238A)

Title: Process for the manufacture of a fertiliser

Abstract: 559,238. Fertilizers. COMYN, M. June 5, 1942, No. 7690. Convention date, April 23. [Class 111] [Also in Group III]

Abstract: 359,250. Fertilizers. CO-1141, 11. June 3, 1942, No. 7050. Convention date, April 25, 1941 [Class 111] [Also in Group 11]. A fertilizer containing citric acid soluble phosphates is obtained by mixing together rock phosphate and a careous shale containing sulphur, iron, phosphates, silica and alimina as found in County Clare, Eire, crushing and heating the mixture to near the point of fusion and grinding the burnt mixture to a powder. Calcium carbonate or silica or sulphur compounds may be added if insufficient in the raw materials.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);
C05B13/00 (Core/Invention)
International (IPC 1-7): C05B13/02
CPC: C05B13/02
European: C05B13/02 C05B13/02+D3/04

Family:

Publication number	Publication date	Application number	Application date
GB559238 A	19440210	GB19420007690	19420605

Probable Assignee: MICHAEL COMYN

Assignee(s): (std): MICHAEL COMYN

51) Family number: 2848408 (US4803268A)

© PatBase

Title: Process for the preparation of cyclohexanedionecarboxylic acid derivatives

Abstract: The present invention relates to a novel, optimized process for the preparation of cyclohexanedionecarboxylic acid derivatives of formula I which can be carried out in a single vessel affording a very good yield, which process comprises heating a reactive carboxylic acid derivative of formula III (III) wherein X is a halide, an alkylsulfonic or arylsulfonic acid radical or the molecular radical which is necessary to form an anhydride and R1 is alkyl or cycloalkyl, with an alkali metal cyanide or copper cyanide, in an inert organic solvent, to give a mixture, then adding in succession to said mixture, at a temperature in the range from 0 DEG C. to room temperature, zinc chloride, an equimolar amount, with respect to the carboxylic acid derivative of formula III, of a 3,5-cyclohexanedione-1-carboxylic acid derivative of formula II (II) wherein A is an ester or amide radical, and, dropwise, an amine, and, after acidifying the reaction mixture with an aqueous acid, isolating the resultant 4-acyl-3,5-cyclohexanedione-1-carboxylic acid derivative of formula I (I) +TR by extraction. Said cyclohexanedionecarboxylic acid derivatives have herbicidal and plant growth regulating properties.

Classifications:

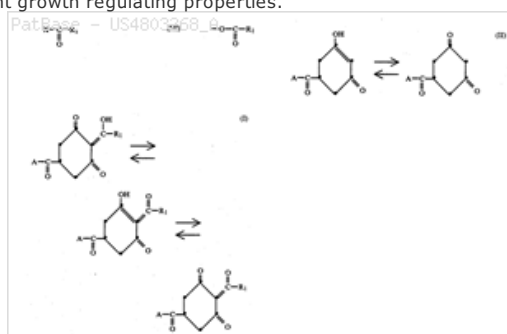
International (IPC 8-9): A01N37/42 C07C201/00 C07C205/43
C07C231/00 C07C231/12 C07C233/12 C07C235/82 C07C253/00
C07C255/55 C07C255/60 C07C313/00 C07C323/12 C07C323/40
C07C51/00 C07C51/347 C07C62/00 C07C62/38 C07C67/00
C07C67/22 C07C69/757 C07D295/18
C07D295/185 (Advanced/Invention);
A01N37/42 C07C201/00 C07C205/00 C07C231/00 C07C233/00
C07C235/00 C07C253/00 C07C255/00 C07C313/00 C07C323/00
C07C51/00 C07C51/347 C07C62/00 C07C67/00 C07C69/00
C07D295/00 (Core/Invention)

International (IPC 1-7): A01N37/42 A01N43/36 A01N43/40
A01N43/84 C07C102/00 C07C102/00 C07C103/19 C07C103/737
C07C121/75 C07C121/78 C07C149/14 C07C149/18 C07C149/20
C07C149/24 C07C149/26 C07C51/347 C07C62/00 C07C62/00
C07C62/38 C07C67/22 C07C67/30 C07C69/757 C07C79/22
C07C89/00 C07C89/00 C07C93/197 C07D279/10 C07D295/18

CPC: C07D295/185 C07C51/347 C07C323/00

European: 124CB7M 124CB7Z2 C07C323/00 C07C51/347 C07D295/185

US: 544/172 544/58.4 546/237 546/238 548/539 556/117 558/414 560/116 560/118 560/125 560/126 562/500 562/507 562/508



Family:

Publication number	Publication date	Application number	Application date
DE3569104 D1	19890503	DE19853569104	19850926
EP0177450 A1	19860409	EP19850810441	19850926
EP0177450 B1	19890329	EP19850810441	19850926
JP61087642 A2	19860506	JP19850219984	19851002
US4803268 A	19890207	US19870008445	19870129

Priority:

CH19840004734 19841002 US19850778109 19850920

Probable Assignee: CIBA GEIGY CORP

Assignee(s): (std): CIBA GEIGY AG ; CIBA GEIGY CORP

Inventor(s): (std): BRUNNER HANS GEORG ; BRUNNER HANS GEORG DR ; HANSU GEOROGU BURUNNAA ; MUELLER URS ; MULLER URS DR ; URUSU MIYURAA

Designated states: BE CH DE FR GB IT LI NL

52) Family number: 51113416 (US2013299429A)

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Title: WASTEWATER TREATMENT PROCESS

Abstract: A method for processing fines materials generated as a by-product from the screening and washing of sand and gravel includes the steps of drying, pelletising and firing the fines materials to produce a ceramic material in the form of porous pellets which have enhanced properties for the removal of phosphorus and pathogens from wastewater.

Classifications:

International (IPC 8-9): B01J20/04 B01J20/06 B01J20/08 B01J20/10
B01J20/28 C02F1/28 C04B18/02 C04B33/132 C04B33/32
C04B35/195 C04B35/20 C04B35/626 C04B38/00 (Advanced/Invention)
CPC: C02F1/281 B01J20/08 B01J20/103 B01J20/28004
B01J20/28011 C02F2101/105 C04B18/027 C04B33/1324 C04B33/32
C04B35/195 C04B35/20 C04B35/62695 C04B38/009
C04B2235/3208 C04B2235/3217 C04B2235/3272 C04B2235/656
C04B2235/95 B01J20/041 B01J20/3007 B01J20/3078 B01J2220/4875
Y02W30/93 Y02P40/67 Y02P40/69 B01D24/02 B01D29/0027
B01D39/06 B01D46/0036 B01D2215/00 B01D2253/104
B01D2253/106 B01D2253/108 B01D2253/1085 B01D2253/1124
B01D2257/55

European: C02F1/28B C04B18/02L C04B33/132D C04B33/32

C04B35/195 C04B35/20 C04B35/626A24 C04B38/00P M02F101/10C
M04B235/32D4 M04B235/32F M04B235/32K2 M04B235/656
M04B235/95
US: 210/660 210/663 264/43

PatBase - US2013299429_AA

Figure 1: Equilibrium Phosphorus Concentration versus Mass of Media Used

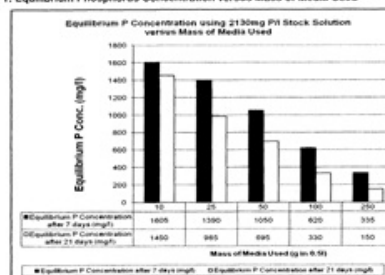
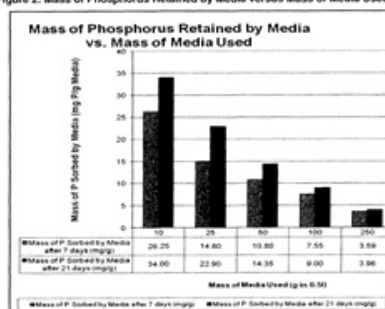


Figure 2: Mass of Phosphorus Retained by Media versus Mass of Media Used



Family:

Publication number	Publication date	Application number	Application date
AU2011331064 AA	20120524	AU20110331064	20111121
AU2016213741 AA	20160825	AU20160213741	20160810
CA2855809 AA	20140513	CA20112855809	20111121
EP2455351 A1	20120523	EP20100191952	20101119
EP2640678 A2	20130925	EP20110799246	20111121
US2013299429 AA	20131114	US20110988061	20111121
WO12066148 A2	20120524	WO2011EP70605	20111121
WO12066148 A3	20120830	WO2011EP70605	20111121

Priority:

EP20100191952 20101119 AU20110331064 20111121 WO2011EP70605 20111121
EP20110799246 20111121 AU20160213741 20160810

Probable Assignee: PHOSBOX TECHNOLOGIES LTD

Assignee(s): (std): CONNAUGHTON NOEL ; NALLY DERMOT ; PHOSBOX TECHNOLOGIES LTD ; WOOD JAMIE

Assignee(s): PHOSBOX TECHNOLOGIES LTD TOBERAVADDY COUNTY ROSCOMMON ATHLEAGUE IE ; PHOSBOX TECHNOLOGIES LIMITED

Inventor(s): (std): CONNAUGHTON NOEL ; NALLY DERMOT ; WOOD JAMIE

Inventor(s): WOOD JAMIE IE ; NALLY DERMOT IE ; CONNAUGHTON NOEL IE

Agent(s): ACTUATE PATENT ATTORNEYS; SPRUSON AND FERGUSON; MCMILLAN LLP; SCHUETTE GEAROID; SCHUTTE GEAROID ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

53) Family number: 49147430 (WO12143681A2)

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Title: COMPOSITIONS FOR GROWTH AND VIGOUR IN VEGETABLES

Abstract: Coating composition for applying to vegetable plant structures from which roots and shoots are capable of growing, wherein the said coating composition comprises one or more organic materials having a melting point of =50 degrees Centigrade and one or more additives, methods of making such compositions and coated vegetable plant structures such as seeds of vegetable plants.

Classifications:

International (IPC 8-9): A01C1/06 A01N25/00 A01N25/08 A01N25/12 A01N25/24 A01N63/00 A01P21/00 C05B17/00 C05B17/02 C05F11/08 C05F11/10 C05G3/00 C09D191/06 C09D5/00 C09D7/12 (Advanced/Invention)

CPC: C09D191/06 A01C1/06 A01N25/24 A01N63/00 C09D5/00 C08L2205/18 C05B17/00 A01N25/08 A01N25/12 C05B17/02 C05F11/08 C05G3/0035 C05G3/0047 A01N25/00 C09D7/40

Family:

Publication number	Publication date	Application number	Application date
GB201106758 A0	20110601	GB20110006758	20110420
GB201206947 A0	20120606	GB20120006947	20120419
GB2490240 A1	20121024	GB20120006947	20120419
GB2490240 B2	20151202	GB20120006947	20120419
WO12143681 A2	20121026	WO2012GB00363	20120419
WO12143681 A3	20130613	WO2012GB00363	20120419

Priority:

GB20110006758 20110420

Probable Assignee: EXOSECT LTD**Assignee(s):** (std): EXOSECT LTD ; JESSOP NICHOLAS HUGH HYLTON**Assignee(s):** EXOSECT LIMITED**Inventor(s):** (std): JESSOP NICHOLAS HUGH HYLTON**Inventor(s):** NICHOLAS HUGH HYLTON JESSOP**Agent(s):** WALTHER WOLFF AND CO**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**54) Family number: 43630432 (WO10142004A2)**

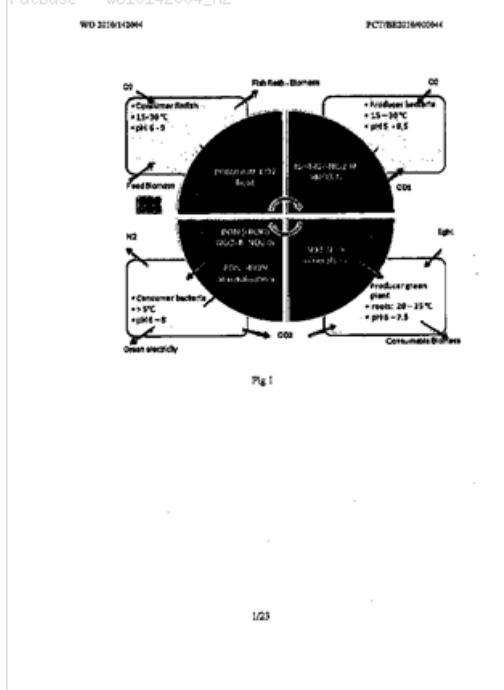
© PatBase

Title: CONTROLLED BIOSECURE AQUATIC FARMING SYSTEM IN A CONFINED ENVIRONMENT

Abstract: The present invention relates generally to improving the bio security and the stability of intensive recirculating aquatic farming systems for instance by hard and soft sensing and control of the pH and alkalinity in an aquatic farming system and in response thereto optimal pH and alkalinity normalisation and nitrogen removal. This control is aimed at reduce toxicity in particular nitrogen toxicity on the living organism and at preventing biosystem collapse. Yet more particularly the invention concerns a control system to restore the biosystem's homeostasis of intense recirculating aquatic farming systems. The system of present invention to control the pH is particularly suitable for an aquatic farming system that needs a normo-pH suitable for the integration intensive recirculating farming of aquatic animals with the farming of soilless hydroponics crop farming. The present invention relates generally to a controlled farming system for energy efficient farming in a confined space that is monitored and controlled by a hard and soft sensing system whereby the controlled farming system comprises reactors and storage containers, which are interconnected and/or are communicating with the confined space, which comprises the farming system. In particular embodiment the energy, biomass and molecule flows in the internal environment of the reactors, the storage containers and the confined space comprising the reactors and storage containers are controlled for energy efficient farming of aquatic organisms and crops and the minimal waste of energy and material in the external environment. More particularly the present invention concerns a system and method for farming of crops and aquatic animals with improved control of the systems components for optimal use of the biomass and energy input and less energy and biomass waste output.

Classifications:**International (IPC 8-9):** A01K63/04 C12M1/00 (Advanced/Invention)**CPC:** A01K63/04 C12M21/04 C12M23/58 Y02E50/343 C12M29/12**European:** A01K63/04

PatBase - WO10142004_A2

**Family:**

Publication number	Publication date	Application number	Application date
GB200910007 A0	20090722	GB20090010007	20090610
GB200910178 A0	20090729	GB20090010178	20090615
GB200915161 A0	20091007	GB20090015161	20090831
WO10142004 A2	20101216	WO2010BE00044	20100611
WO10142004 A3	20110707	WO2010BE00044	20100611
WO10142004 A8	20111124	WO2010BE00044	20100611

Priority:GB20090010007 20090610
GB20090013882 20090810
GB20090015161 20090901GB20090010178 20090615
US20090273869P 20090810GB20090011415 20090702
GB20090015161 20090831**Probable Assignee:** UNIV LEUVEN KATH**Assignee(s):** (std): KATHOLIEKE UNIVERSITEIT LEUVEN ; DE SCHRYVER PETER ; GODDEERIS BRUNO ; UNIV LEUVEN KATH ; SORGELOOS PATRICK ; VAN HOESTENBERGHE STIJN ; VERSTRAETE WILLY ; UNIV GENT ; AERTS JEAN MARIE ; BERCKMANS DANIEL**Assignee(s):** KATHOLIEKE UNIVERSITEIT LEUVEN ; UNIVERSITEIT GENT

Inventor(s): (std): AERTS JEAN MARIE ; BERCKMANS DANIEL ; DE SCHRYVER PETER ; GODDEERIS BRUNO ; VAN HOESTENBERGHE STIJN ; SORGELOOS PATRICK ; VERSTRAETE WILLY

Agent(s): CHALTIN PATRICK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

55) Family number: 55368435 (WO13186257A1)

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Title: METHOD OF PROCESSING BASIC OXYGEN FURNACE SLAG

Abstract: The invention concerns a method of processing basic oxygen furnace slag comprising the steps of: a) cooling basic oxygen furnace slag from an initial temperature Ti of between 1500 and 1600 degrees centigrade to a bearing temperature Tp of between 1200 and 1400 degrees centigrade, it being understood that: - the average speed of cooling from initial temperature Ti to bearing temperature Tp is less than or equal to 10 degrees centigrade per minute, and - the maximum speed of cooling from initial temperature Ti to bearing temperature Tp is less than 20 degrees centigrade per minute, then b) optionally keeping the basic oxygen furnace slag at bearing temperature Tp for 1 to 48 hours, then c) cooling the basic oxygen furnace slag from bearing temperature Tp to a final temperature Tf less than 1200 degrees centigrade, whereby lime silicate phases having an average size greater than 30 µm and lime ferrite phases form, d) crushing the basic oxygen furnace slag obtained after cooling, e) separating the lime silicate phases and the lime ferrite phases.

Classifications:

International (IPC 8-9): C04B5/00 C04B5/06 C21B3/08 C21C5/28 C21C5/36 (Advanced/Invention)

CPC: C04B5/00 C21B3/08 C21C5/36 C04B5/06

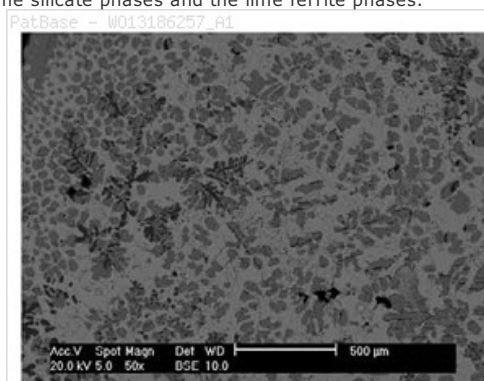


FIG.2

Family:

Publication number	Publication date	Application number	Application date
■ CN104364396 A	20150218	CN201380031304	20130612
■ CN104364396 B	20160601	CN201380031304	20130612
■ DE602013042735 D1	20180927	DE201360042735T	20130612
■ EP2859125 A1	20150415	EP20130727949	20130612
■ EP2859125 B1	20180829	EP20130727949	20130612
■ ES2699808 T3	20190212	ES20130727949T	20130612
■ FR2991693 A1	20131213	FR20120055477	20120612
■ FR2991693 B1	20140808	FR20120055477	20120612
■ JP2015526588 T2	20150910	JP20150516601T	20130612
■ JP6133976 B2	20170524	JP20150516601T	20130612
■ KR20150023529 A	20150305	KR20147036847	20130612
■ WO13186257 A1	20131219	WO2013EP62142	20130612

Priority:

FR20120055477 20120612 EP20130727949 20130612 WO2013EP62142 20130612

Probable Assignee: CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

Assignee(s): (std): CENTRE NAT RECH SCIENT ; CENTRE NATIONAL DE LA RECHERCHE SCIENT C N R S ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

Assignee(s): CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

Inventor(s): (std): THEVENIN GUILLAUME ; POIRIER JACQUES ; PRIGENT PASCAL

Inventor(s): JACQUES POIRIER ; GUILLAUME THEVENIN ; PASCAL PRIGENT

Agent(s): BLOT PHILIPPE ROBERT EMILE; LAVOIX; CURELL MIREIA; CABINET LAVOIX; BLOT PHILIPPE ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

56) Family number: 1872462 (US4511543A)

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Title: METHOD FOR BENEFICIATION OF PHOSPHATE ROCK

Abstract: The present invention relates to a method for beneficiation of phosphate rock by a thermal treatment, wherein an appreciable increase in P2O5 and decrease in cadmium contents in the calcined product are achieved. According to the invention, the phosphate rock is contacted with hot gases possessing a temperature in the range of between 700 DEG C. to

1600 DEG C. for a period of below 60 seconds and subsequently the fines are removed by a conventional classification method thus obtaining an up-graded phosphate product with a relatively low cadmium content. The up-graded phosphate product is also characterized by a relatively low sulfide content as well as low organic matter, which are very advantageous in the phosphoric acid manufacture therefrom. One of the advantages of the method is the almost complete recovery of the P2O5 present in the phosphate rock since no slaking for calcium oxide removal is utilized.

Classifications:

International (IPC 8-9): B07B15/00 C01B25/01 (Advanced/Invention); B07B15/00 C01B25/00 (Core/Invention)

International (IPC 1-7): B03B1/02 B07B15/00 C01B25/01 C01B25/18 C01F1/00 C01F5/00

CPC: Y02P20/129 C01B25/01

European: C01B25/01

US: 423/107 423/157.2 423/167 423/319

PatBase - US4511543_A

U.S. Patent Apr. 16, 1985 Sheet 1 of 2 4,511,543

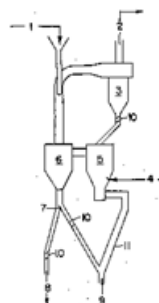


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
DE3413664 A1	19841018	DE19843413664	19840411
DE3413664 C2	19930722	DE19843413664	19840411
FR2544300 A1	19841019	FR19840005842	19840412
FR2544300 B1	19861226	FR19840005842	19840412
GB2139205 A1	19841107	GB19840008337	19840330
GB2139205 B2	19861112	GB19840008337	19840330
GB8408337 A0	19840510	GB19840008337	19840330
IL68400 A0	19830731	IL19830068400	19830414
IL68400 A1	19860331	IL19830068400	19830414
JP1768982 C3	19930630	JP19840071891	19840412
JP4054614 B4	19920831	JP19840071891	19840412
JP59199516 A2	19841112	JP19840071891	19840412
NO162014 B	19890717	NO19840001492	19840413
NO162014 C	19920422	NO19840001492	19840413
NO841492 A	19841015	NO19840001492	19840413
NO841492 L	19841015	NO19840001492	19840413
US4511543 A	19850416	US19840590278	19840316

Priority:

IL19830068400 19830414

Probable Assignee: ROTEM AMFERT NEGEV LTD

Assignee(s): (std): IMI TAMI INST RESEARCH ; NEGEV PHOSPHATES LTD ; IMI TAMI INSTITUTE RESEARCH ; NEJIEBU FUOSUFUEITOSU LTD

Assignee(s): SHMUEL CARMON ; ROTEM FERTILIZERS LTD ; MEYER BEHAS ; ROTEM AMFERT NEGEV LTD ; ROTEM FERTILIZER LTD ; NEJIEBU FUOSUFUEITOSU LTD ; ROTEM FERTILIZERS LTD DIMONA IL ; IMI TAMI INSTITUTE FOR RESEARCH AND DEVELOPMENT LIMITED ; IMI TAMI INST FOR RESEARCH AND DEVELOPMENT ; IMI TAMI INST FOR RESEARCH AND DEVELOPMENT LTD

Inventor(s): (std): AXELROD SHIMSHON ; BEHAR MEYER ; CARMON SHMUEL ; IEFUDA KEREN ; KEREN YEHUDA ; MEIERU BEHAARU ; MEYER BEHAR ; SHIMSHON AXELROD ; SHIMUSHIYON AKUSERUOTSUDO ; CARMON SCHMUEL ; SHIYUMIYUERU KARUMON ; SHMUEL CARMON ; YEHUDA KEREN ; AXELROD SCIMSHON

Inventor(s): YEHUDA KEREN SHMUEL CARMON MEYER BEHAR ET SHIMSHON ; YEHUDA KEREN SHMUEL CARMON MEYER BEHAR ET SHIMSHON AXELROD ; SHUMYUERU KARUMON ; CARMON SCHMUEL ARAD IL ; SHIMUSHON AKUSERUOTSUDO ; MEYER BEHAS ; SCHMUEL CARMON ; KEREN YEHUDA KIRYAT MOTZKIN IL ; BEHAR MEYER BEER SHEVA IL ; AXELROD SHIMSHON HAIFA IL

Agent(s): SIMON LAVIE

57) Family number: 12458465 (DE19529930A1)

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Title: FERTILISER FROM WASTE CONTG. THE HAZARDOUS MATERIAL ASBESTOS - PRODUCED BY TREATMENT E.G. WITH HEAT OR ACID

Abstract: Fertiliser is claimed from hazardous waste contg. asbestos. The waste material is decommissioned asbestos-contg. materials (fibre-binder composite "asbestos cement" or "sprayed asbestos" loosely bound with hydrated Portland cement), and this material is transformed by a preparatory treatment and converted to a raw material for fertiliser mfr. or directly

converted to a fertiliser. Pref. the process comprises treating the material thermally, then immediately subjecting the thermally treated material to an abrupt temp. change to produce an asbestos-free material: or treating cement-bound asbestos (esp. chrysotile asbestos) to treatment with acid, pref. nitric or phosphoric acid.

Classifications:

International (IPC 8-9): C05D3/02 (Advanced/Invention);
C05D3/00 (Core/Invention)
International (IPC 1-7): C05B11/10 C05C5/04 C05D3/02
CPC: C05D3/02
European: C05D3/02

Family:

Publication number	Publication date	Application number	Application date
DE19529930 A1	19970206	DE19951029930	19950802

Priority:

DE19951029930 19950802

Probable Assignee: WITEGA ANGEWANDTE WERKSTOFF FORSCHUNG GEMEINNUETZIGE GMBH ADLERSHOF

Assignee(s): (std): WITEGA ANGEWANDTE WERKSTOFF FO ; WITEGA ANGEWANDTE WERKSTOFF FORSCHUNG GEMEINNUETZIGE GMBH ADLERSHOF

Assignee(s): WITEGA ANGEWANDTE WERKSTOFF FORSCHUNG GEMEINNUETZIGE GMBH ADLERSHOF 12489 BERLIN DE ; WITEGA ANGEWANDTE WERKSTOFF FORSCHUNG GEMEINNUETZI

Inventor(s): (std): FORKEL KLAUS DR ; KOKOSCHKO RENE ; WIHSMANN FRED GUSTAV PROF DR

Inventor(s): WIHSMANN FRED GUSTAV PROF DR 12487 BERLIN DE ; KOKOSCHKO RENE DIPL KRIST ; KOKOSCHKO RENE DIPL KRIST 15566 SCHOENEICHE DE ; FORKEL KLAUS DR 96528 SCHALKAU DE

58) Family number: 8450466 (ZA9400074A)

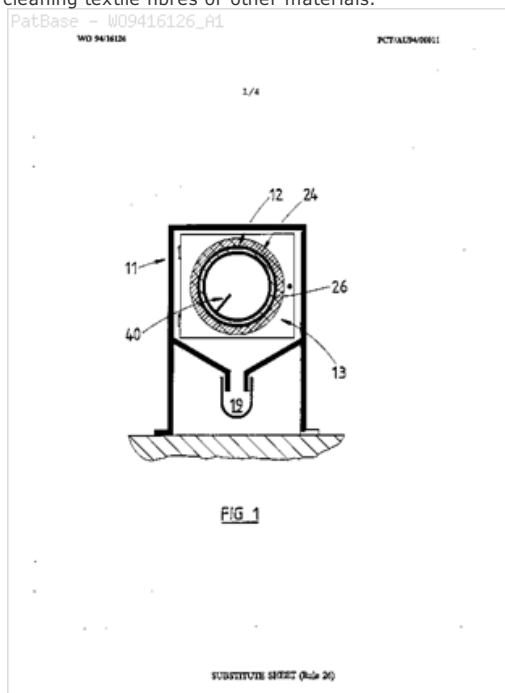
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Title: METHOD AND APPARATUS FOR CLEANING TEXTILE FIBERS OR OTHER MATERIALS.

Abstract: The invention relates to a method for cleaning textile fibres or other materials which comprises contacting said textile fibres or other materials with a finely-divided particulate material, the particles of which have a capacity to adsorb oil, grease and other contaminants. The invention also relates to a method for controlling parasitic infestations in animals involving the finely-divided particulate material and an apparatus for cleaning textile fibres or other materials.

Classifications:

International (IPC 8-9): D01B3/00 D01C3/00 D01G9/00 D01G9/14 D02J7/00 (Advanced/Invention);
D01B3/00 D01C3/00 D01G9/00 D02J7/00 (Core/Invention);
D01B D01C D01G D02J (Subclass/Invention)
International (IPC 1-7): D01B D01B3/00 D01C D01C3/00 D01G D01G9/00 D01G9/14 D02J D02J7/00
CPC: D01B3/00 D01C3/00
European: D01B3/00 D01C3/00



Family:

Publication number	Publication date	Application number	Application date
AU199458290 A1	19940815	AU19940058290	19940107
AU679030 B2	19970619	AU19940058290	19940107
EP0678126 A1	19951025	EP19940904100	19940107
EP0678126 A4	19960228	EP19940904100	19940107
WO9416126 A1	19940721	WO1994AU00011	19940107
ZA9400074 A	19940811	ZA19940000074	19940106

Priority:

AU1993PL06719 19930108 AU1993PM01511 19930930 AU19940058290 19940107
WO1994AU00011 19940107

Probable Assignee: HALLMARK DELL PTY LTD

Assignee(s): (std): COADE DAVID ALAN ; HALLMARK DELL PTY LTD ; SWAN JOHN MELVIN

Inventor(s): (std): COADE DAVID ALAN ; SWAN JOHN MELVIN

Inventor(s): DAVID ALAN COADE ; JOHN MELVIN SWAN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

Designated states: AT AU BE CH CN DE DK ES FR GB GR IE IT JP LU MC NL NZ PT SE US

Title: NUTRITIVE GLASSES FOR AGRICULTURE

Abstract: A vitreous product which can be used in agriculture is disclosed. With the exception of nitrogen, this vitreous product contains all the major and minor mineral elements which are essential for the nutrition of plants. The vitreous products can contain the following constituents, taken in the following proportions by weight: -SiO₂ 25 to 65 percent Fe₂O₃ 1 to 15 percent -P₂O₅ 1 to 15 percent B₂O₃ 0.01 to 2 percent -K₂O 5 to 35 percent MnO 0.01 to 3 percent -CaO 11 to 35 percent ZnO 0.01 to 3 percent -MgO 1 to 10 percent CuO 0.01 to 2 percent -SO₃ 0.01 to 1 percent MoO₃ 0.01 to 3 percent -Na₂O 0 to 2 percent -Al₂O₃ 0 to 25 percent -

Classifications:

International (IPC 8-9): A01G31/00 C03C13/00 C03C3/097
C03C4/00 C05D9/00 C05D9/02 C05G1/00
C05G3/00 (Advanced/Invention);
A01G31/00 C03C13/00 C03C3/076 C03C4/00 C05D9/00 C05G1/00
C05G3/00 (Core/Invention)

International (IPC 1-7): A01G31/00 C03C13/00 C03C3/066
C03C3/097 C03C4/00 C05B17/02 C05D9/00 C05D9/02 C05G1/00
C05G3/00 G05G1/00

CPC: C05G3/0047 C05D9/00 A01G24/00 A01G24/18

European: A01G31/00B C05D9/00 C05G3/00B4 K01G31/00M

US: 501/35 501/63 71/45 71/46 71/52 71/53 71/62 71/64.13

PatBase - US4867779_A

SiO ₂	25 to 65%	Fe ₂ O ₃	1 to 15%
P ₂ O ₅	1 to 15%	B ₂ O ₃	0.01 to 2%
K ₂ O	5 to 35%	MnO	0.01 to 3%
CaO	11 to 35%	ZnO	0.01 to 3%
MgO	1 to 10%	CuO	0.01 to 2%
SO ₃	0.01 to 1%	MoO ₃	0.01 to 3%
		Na ₂ O	0 to 2%
		Al ₂ O ₃	0 to 25%

Family:

Publication number	Publication date	Application number	Application date
BRPI8606226 A	19870929	BR1986PI06226	19861216
DE3684695 D1	19920507	DE19863684695	19861215
DK163814 B	19920406	DK19860006050	19861216
DK163814 C	19920824	DK19860006050	19861216
DK605086 A	19870618	DK19860006050	19861216
DK605086 A0	19861216	DK19860006050	19861216
EP0231691 A1	19870812	EP19860402799	19861215
EP0231691 B1	19920401	EP19860402799	19861215
ES2031829 T3	19930101	ES19860402799T	19861215
FR2591423 A1	19870619	FR19850018672	19851217
FR2591423 B1	19880916	FR19850018672	19851217
IL80982 A0	19870331	IL19860080982	19861215
IL80982 A1	19901223	IL19860080982	19861215
JP62148337 A2	19870702	JP19860299068	19861217
KR19870005942 A	19870708	KR19860010821	19861217
US4867779 A	19890919	US19860942722	19861217
US5037470 A	19910806	US19890329875	19890328
ZA8609417 A	19871230	ZA19860009417	19861215

Priority:

FR19850018672 19851217 US19860942722 19861217 US19890329875 19890328

Probable Assignee: SAINT GOBAIN SA

Assignee(s): (std): SAINT GOBAIN ISOVER ; SAINT GOBAIN SA

Assignee(s): ISOVER SAINT GOBAIN ; ISOVER SAINT GOBAIN COURBEVOIE FR ; ISOVER SAINT GOBAIN LES MIROIRS

Inventor(s): (std): BLANC DENISE ; MEUNIER JEAN PAUL M ; MATZEN GUY M ; JEAN PAUL M MEUNIER ; GUY M MATZEN ; MEUNIER JEAN PAUL ; MONTARONE MARYSE ; MEUNIER DECEASED JEAN PAUL ; MEUNIER JEAN PAUL ; MARIIZU MONTARONU ; JIYAN POORU MUUNIE ; MATZEN GUY ; GII MAZAN ; DONIZU BURAN

Inventor(s): BLANC DENISE F 06600 ANTIBES FR ; MONTARONE MARYSE F 06000 NICE FR ; JEAN PAUL MEUNIER GUY MATZEN ET DENISE BLANC ; MATZEN GUY F 75018 PARIS FR ; MEUNIER JEAN PAUL F 60600 CLERMONT FR ; JEAN PAUL MEUNIER ; GUY MATZEN ; MARYSE MONTARONE ; DENISE BLANC

Agent(s): REINHOLD COHN AND PARTNERS

Designated states: BE DE ES FR GB IT LU NL SE

Title: Granular potassium metaphosphate

Abstract: <PICT:0832011/III/1> Potassium metaphosphate, (KPO₃)_n, is prepared by contacting potassium chloride and phosphoric acid at a temperature below the fusion point of the product in the presence of a moving mass of inert particles, whereby the potassium metaphosphate is prepared in granular form. The reactants may be added separately to the inert particles or may be pre-mixed. Reaction temperatures are normally between 350 DEG and 600 DEG C. The inert particles may be constituted by potassium metaphosphate itself or by potassium chloride or sulphate. The phosphoric acid employed may be orthophosphoric, pyro-phosphoric or phosphoric acid having an enhanced P₂O₅ content due to the addition of phosphorus pentoxide. If it is desired to increase the K₂O: P₂O₅ ratio, sulphuric acid may be added to the phosphoric acid but normally the ratio will be unity. Hydrochloric acid is evolved during the reaction and may be recovered. As shown in the Figure, a slurry of phosphoric acid and potassium sulphate is added through a line 2 to a reactor 1 which contains hot recycled material at a temperature of 500 DEG C. entering through line 3. The material leaves the kiln at 200 DEG C. in a freeflowing condition and is passed to a heated rotary kiln 5 where the temperature is raised again to 500 DEG C. Hydrochloric acid is withdrawn through lines 12 and 13. A portion of the material leaving the kiln is recycled to line 3 but the major portion passes to a cooler 6 from which it is passed to a screen 8 which separates the products, fines and oversize. The desired quantity is recycled through line 11 and recycle heater 4 back to the feed shoot 3. In order to produce a relatively pure hydrochloric acid the phosphoric acid employed may be defluorinated by adding part of the potassium chloride to the acid, thereby precipitating potassium silicofluoride which is removed by filtration, and thereafter reacting the purified acid with further potassium chloride. ALSO: Granular potassium metaphosphate, (KPO₃)_n is prepared by contacting potassium chloride and phosphoric acid at a temperature below the fusion point of the product in the presence of a moving mass of inert particles, which may be potassium chloride, sulphate or metaphosphate. The reactants may be added separately to the inert particles or may be pre-mixed. Reaction temperature are normally between 350 and 600 DEG C. The phosphoric acid employed may be orthophosphoric, pyro-phosphoric or phosphoric acid having an enhanced P₂O₅ content due to the addition

of phosphorus pentoxide. If it is desired to increase the K2O: P2O5 ratio, sulphuric acid may be added to the phosphoric acid but normally the ratio will be unity.

Classifications:

International (IPC 8-9): B01J2/00 C01B25/445

C05B13/06 (Advanced/Invention);

B01J2/00 C01B25/00 C05B13/00 (Core/Invention)

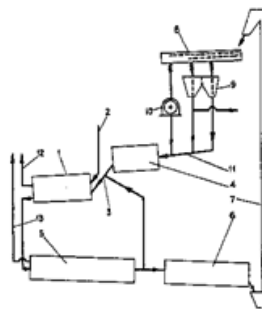
International (IPC 1-7): B01J2/00 C01B25/445 C05B13/06 C05B19/00

CPC: B01J2/00 C01B25/445 C05B13/06

European: B01J2/00 C01B25/445 C05B13/06

PatBase - GB832011_A

832,011 COMPLETE SPECIFICATION
of
1987 The drawing is a reproduction of
the original in a reduced scale.



Family:

Publication number	Publication date	Application number	Application date
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BE669717 A	19660316	BE19650669717	19650916
DE1109716 B	19610629	DE1958S059265	19580801
DE1592757 A1	19710121	DE19651592757	19650916
ES270600 A3	19620101	ES19610270600	19610919
FR1262575 A	19610605	FR19580771691	19580801
FR78825 E	19620914	FR19600838234	19600909
FR88879 E	19670407	FR19650031626	19650916
GB832011 A	19600406	GB19570024471	19570801
NL110738 C	00000000		00000000
NL230130 A	00000000		00000000
NL6511994 A	19660317	NL19650011994	19650915

Priority:

GB19570024471 19570801 FR19580771691 19580801 FR19600838234 19600909
GB19640037839 19640916 FR19650031626 19650916

Probable Assignee: SCOTTISH AGRICULTURAL IND LTD

Assignee(s): (std): SCOTTISH AGRICULTURAL IND LTD

Assignee(s): SCOTTISH AGRICULTURAL INDUSTRIES LIMITED ; SCOTTISH AGRICULTURAL INDUSTRIES LTD

Inventor(s): (std): STEWART RAITT JOHN ; RAITT JOHN STEWART ; RAISTRICK BERNARD

61) Family number: 8596493 (DE4024727A1)

© PatBase

Title: MINERAL WOOL PRODS. WITH HYDROPHILIC PROPERTIES - BY TREATING MINERAL WOOL WITH MIXT. OF PF RESIN BINDER, NITROGEN-CARBONYL CPD., AQ. ACRYLIC] RESIN MICRO-SOL AND SPECIFIED SURFACTANT

Abstract: A process for the prodn. of mineral wool prods. esp. sheets, with hydrophilic properties (I), by applying a hydrophilising agent (II) to the unravelled fibres from a mineral melt. (a) (II) in a mixt. of a PF resin-based binder (A), a water-soluble nitrogen-carbonyl cpd. (B), an aq. microsol of an acrylic resin (C) and a mixt. of COOH gp.-contg. fatty acid condensn prods. with organic phosphate esters (D), (b) the hydrophilised fibre is laid down as strip, (c) the fibres and the adhering (II) are subjected to heat treatment and (d) the strip is processed further to the required prods. (I). Also claimed are prods. (I), and hydrophilising agent (II). USE/ADVANTAGE - (I) are useful as a fertiliser and growth substrate for plants, esp. for growing plants on roofs, by covering the roof with sheets of (I), putting in the seeds or plants and possibly adding a protective layer, esp. of humus etc. (claimed). (I) is produced with good mechanical strength, using a hydrophilising agent which promotes plant growth and is compatible with the process water.

Classifications:

International (IPC 8-9): A01G31/00 C03C25/26 C05G3/00 (Advanced/Invention);

A01G31/00 C03C25/24 C05G3/00 (Core/Invention)

International (IPC 1-7): A01G7/00 B01F17/14 B01F17/22 C03C25/02 C05G3/00 D06M13/295 D06M13/402 D06M13/432 D06M15/263 D06M15/41 D06M15/423 E04D11/00

CPC: C05G3/0052 C03C25/26 A01G24/00 A01G24/18

European: A01G31/00B C03C25/26 C05G3/00B6 K01G31/00M

Family:

Publication number	Publication date	Application number	Application date
DE4024727 A1	19920206	DE19904024727	19900803

Priority:

DE19904024727 19900803

Probable Assignee: GRUENZWEIG AND HARTMANN

Assignee(s): (std): GRUENZWEIG AND HARTMANN

Assignee(s): GRUENZWEIG AND HARTMANN 6700 LUDWIGSHAFEN DE AG ; GRUENZWEIG AND HARTMANN AG 6700 LUDWIGSHAFEN DE

Inventor(s): (std): SCHIRMEISEN JOSEF DIPL CHEM ; KALWA NORBERT DIPL CHEM DR ; HOLSTEIN WOLFGANG DIPL CHEM DR

Inventor(s): SCHIRMEISEN JOSEF DIPL CHEM 6704 MUTTERSTADT DE ; KALWA NORBERT DIPL CHEM DR 4930 DETMOLD DE ; HOLSTEIN WOLFGANG DIPL CHEM DR 6313 HOMBERG DE

62) Family number: 461493 (DE2003271A1)

© PatBase

Title: SILICATE TREATMENT WITH POLYBASIC WEAK ACIDS - IMPROVES APPLICABILITY

Abstract: Silicate (rocks and minerals) are improved by adding polybasic, weak to medium-strong oxyacid of non-metals and/or their hydrated and water-soluble salts to powdered silicates and heating mixture at 1 atm. to ca 230 degrees C. Product can be mixed with nitrides and/or carbides of sub-group 4-8 transition metals and subjected to heat treatment, gen. at 650-750 degrees C. Thus it is possible to make product in form of ceramic, glass, foam etc. which can be used as fertiliser, glass, ion exchanger instead of zeolites, insulant, ceramic with high dielectric constant (pyroelectric), in aqs. dispersion for rustproofing steel and iron etc.

Classifications:

International (IPC 8-9): C03C11/00 C04B35/16 (Advanced/Invention); C03C11/00 C04B35/16 (Core/Invention)

International (IPC 1-7): C01B33/20

CPC: C03C11/007 C04B35/16

European: C03C11/00F C04B35/16

Family:

Publication number	Publication date	Application number	Application date
DE2003271 A1	19710805	DE19702003271	19700126
DE2003271 B2	19790705	DE19702003271	19700126
DE2003271 C3	19800626	DE19702003271	19700126

Priority:

DE19702003271 19700126

Probable Assignee: INERTOX CHEMIE METALLOBERFLAEC

Assignee(s): (std): INERTOX CHEMIE METALLOBERFLAEC ; WEGENER HERMANN FA

Assignee(s): FA HERMANN WEGENER 3000 HANNOVER ; INERTOX CHEMIE METALLOBERFLAECHEMTECHNIK GMBH AND ; INERTOX CHEMIE METALLOBERFLAECHEMTECHNIK GMBH AND CO KG

Inventor(s): (std): WUESTEFELD ALOYS

Inventor(s): WUESTEFELD ALOYS 7035 WALDENBUCH

63) Family number: 20639498 (US2005016418A)

© PatBase

Title: BINDER SYSTEMS DERIVED FROM AMORPHOUS SILICA AND BASES

Abstract: The present invention relates to compositions comprising the reaction product of amorphous silica or ultra-fine silica and one or more bases. The present invention also relates to materials and method involving the use of such products. In particular, the present invention i.a. relates to new mineral wool products, e.g. products comprising man-made vitreous fibres (such as glass fibres, slag fibres, stone fibres and rock fibres) or perlite, having included therein a binder component which comprises amorphous silica and alkali metal organosiliconates, e.g. potassium methyl siliconate. An important feature of such products is the preparation of the binder systems under vigorous mixing. Such products provide good fire, heat and sound insulating properties. The present invention also provides to a method for removing odorous substances from a gas where materials prepared from ultra-fine silica, water, and one or more components enabling porosity-conferring binding of the material, e.g. a base or bases. Furthermore, the invention provides methods for thixotroping bitumen.

Classifications:

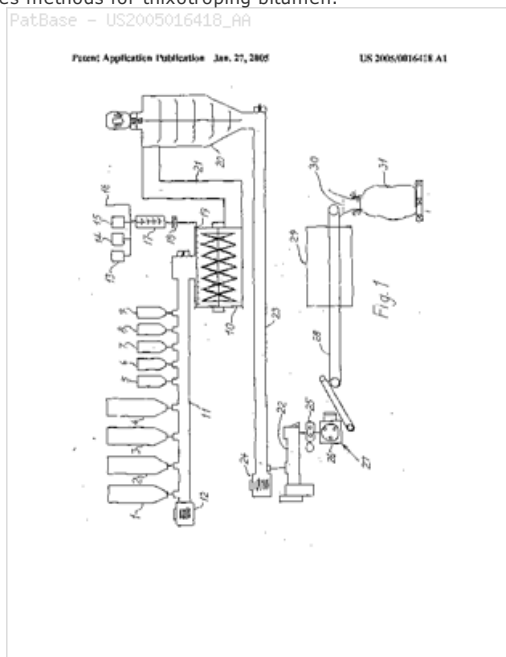
International (IPC 8-9): B01D53/04 C03C25/10 C03C25/42 C04B14/06 C04B18/02 C04B28/00 C04B28/18 C04B28/24 D21H17/68 D21H17/70 D21H21/10 (Advanced/Invention); D21H17/64 D21H17/68 D21H21/10 (Advanced/Non-invention)

International (IPC 1-7): C03B37/00 C03C13/06 C03C25/00 C03C25/10 C04B14/04 C04B28/00 C04B9/02

CPC: Y02W30/91 Y02W30/97 B01D53/02 B01D2253/10 B01D2253/106 B01D2253/306 B01D2257/90 C03C25/42 C04B14/062 C04B18/02 C04B28/003 C04B28/18 C04B28/184 C04B28/24 C04B2111/00767 C04B2111/00793 D21H17/64 D21H17/68 D21H17/70 D21H21/10 C03C25/47

European: B01D53/02 C03C25/10D2 C03C25/42 C04B14/06C C04B18/02 C04B28/00D C04B28/18 C04B28/18B C04B28/24 D21H17/70 L01D253/10 L01D253/106 L01D253/306 L01D257/90 M04B111/00T30 M04B111/00T50 N21H17/64 N21H17/68 N21H21/10

US: 106/38.3 106/38.300P 106/600 106/600S 106/602 106/602S 106/644 106/644S 106/711 106/711S 501/8 501/80 501/80S



Family:

Publication number	Publication date	Application number	Application date
AU199963270 A1	20000522	AU19990063270	19991029
AU199963270 A5	20000522	AU19990063270	19991029
AU209963270 A1	20000522	AU19990063270	19991029
EP1144330 A2	20011017	EP19990950516	19991029
EP1144330 A3	20021113	EP19990950516	19991029
US2005016418 AA	20050127	US20040923130	20040820
US6866709 BA	20050315	US20010830701	20010430
WO0026154 A2	20000511	WO1999DK00588	19991029
WO0026154 A3	20010208	WO1999DK00588	19991029

Priority:

DK19980001400 19981030 WO1999DK00588 19991029 US20010830701 20010430
US20040923130 20040820

Probable Assignee: HOLBEK KJELD

Assignee(s): (std): HOLBEK KJELD ; UNIV AALBORG

Assignee(s): HOLBEK KJELD BREGNEVEJ ; KJELD HOLBEK ; AALBORG UNIV ; AALBORG UNIVERSITET ; GIANTCODE A S ; GIANTCODE A S LUCERNEVEJ 11 KLO KK

Inventor(s): (std): HOLBEK KJELD

Inventor(s): KJELD HOLBEK

Agent(s): BIRCH STEWART KOLASCH AND BIRCH

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

64) Family number: 49147499 (WO12143686A2)

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Title: COMPOSITIONS FOR GROWTH AND VIGOUR IN COTTON

Abstract: Coating composition for applying to cotton seed from which roots and shoots are capable of growing, wherein the said coating composition comprises one or more organic materials having a melting point of = 50 degrees Centigrade and one or more additives, methods of making such compositions and coated cotton seeds.

Classifications:

International (IPC 8-9): A01C1/06 A01N25/00 A01N25/08 A01N25/12 A01N25/24 A01N25/26 A01N63/00 A01P21/00 C05D9/02 C05F11/08 C05F11/10 C05G3/00 C09D191/06 C09D5/00 C09D7/12 (Advanced/Invention)

CPC: A01N25/08 C09D191/06 A01C1/06 A01N25/24 A01N63/00 C09D5/00 A01N25/26 C05F11/10 C05D9/02 C05F11/08 C05G3/0035 A01N25/12 C09D7/40

Family:

Publication number	Publication date	Application number	Application date
GB201106763 A0	20110601	GB20110006763	20110420
GB201206971 A0	20120606	GB20120006971	20120419
GB2490250 A1	20121024	GB20120006971	20120419
GB2490250 B2	20151202	GB20120006971	20120419
WO12143686 A2	20121026	WO2012GB00368	20120419
WO12143686 A3	20130627	WO2012GB00368	20120419

Priority:

GB20110006763 20110420

Probable Assignee: EXOSECT LTD

Assignee(s): (std): EXOSECT LTD ; JESSOP NICHOLAS HUGGH HYLTON

Assignee(s): EXOSECT LIMITED

Inventor(s): (std): JESSOP NICHOLAS HUGH HYLTON ; JESSOP NICHOLAS HUGGH HYLTON

Inventor(s): NICHOLAS HUGH HYLTON JESSOP

Agent(s): DR WALTHER WOLFF AND CO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

65) Family number: 619505 (BR8302609A)

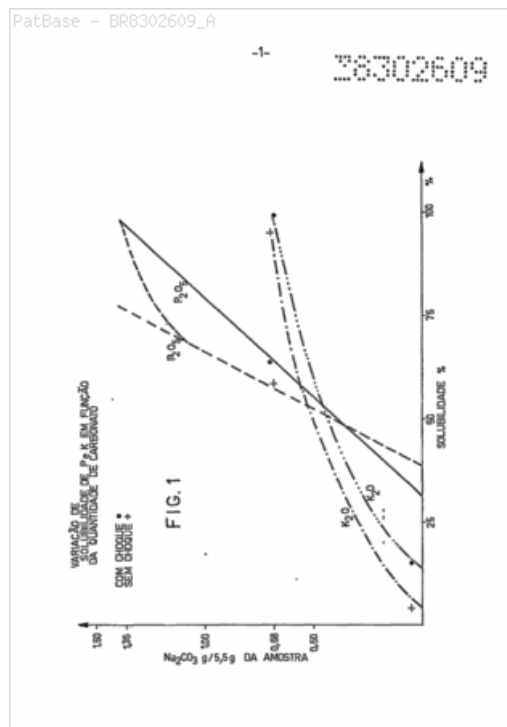
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Title: PROCESSO PARA PRODUCAO DE FERTILIZANTES FOSFATADOS,BEM COMO PROCESSO FERTILIZANTE PROCESS FOR PRODUCTION OF PHOSPHATE FERTILIZERS, AS WELL AS FERTILIZER PROCESS (Machine translation)

Abstract: Source: BR8302609A [PT] M ss»## M #f > I •••• | I | •• ss •••••••• I •••••• R E S UE M O Patente de Invencao: "PROCESSO PARA PRODUCAO DE FERTILI- ZANTES FOSFATADOS, BEM COMO PROCESSO FERTILIZANTE". i Revela-se um processo para producao de fertili- 5 zantes fosfatados, adequados para aplicacao direta ao so lo como adubos ou para adicao ao liquido residual de des tilarias de alcool (vinhoto), antes, no decorrer ou de- pois da amoniacao desse com vistas a obtencao de fertili zantes NPK completos, processo esse que compreende a fu- 10 sao de fosfatos naturais eventualmente utilizando funden tes, o dito processo sendo caracterizado pelo fato de compreender a fusao de misturas de a) fosfato natural, b) biotita ou biotita-xisto, de preferencia biotita, e eventualmente - porem, de preferencia, obrigatoriamente ss15 - c) como fundente, carbonato de sodio sozinho ou com si lica, de preferencia, porem sozinho, obtendo-se fertili- zantes que, alem do fosforo, contem pelo menos parte dos elementos nutrientes adicionais potassio, calcio, magne- sio, sodio, cobre, zinco, silica soluvel, manganes e fer 20 ro. A fusao pode ser realizada entre cerca de 900

Machine translation: M ss» # # M> #f I | I | •• ss R E S E U M the Invention patent: "PROCESS for FERTILISER PRODUCTION-PHOSPHATE as well as ZANTES FERTILIZER PROCESS." i revealed a process for production of fertiliser-5 phosphate zantes, suitable for direct application to the OS it as fertilizers or for addition to the residual liquid from des tilarias alcohol (vinasses), before, during or after the amoniacao that with a view to obtaining complete NPK fertiliser zantes This process, which comprises the fu-10 natural phosphates are eventually using funden tes, the said process being characterized by the fact of understanding the merger of mixtures) phosphate, b) biotite or biotite schist, biotite, and preferably eventually-but, preferably, obligatorily ss 15-c) as flux, sodium carbonate alone or with other lica, preferably, but alone, fertiliser-zantes that, besides the phosphorus, contains at least part of the additional nutrients potassium elements, calcio, magne-sio, sodium, copper, zinc, silica, and manges soluvel fer 20 ro. The merger can be accomplished between about 900 and 1500 degrees centigrade degrees and during a time between about 20:30 minu-tos. The molten material and cold with or without cho t ss it **» i | M ((C t that thermal. After cooling, moi and/or pelotiza-to obtain a suitable size of grao. in the process, you can control the solubility of fertilizer obtained, through the variation of nature 5 za of the raw materials, the variation of proporcoes of the reagents, the variation of grain size of the end product and the type of cooling (with or without cho-what thermal), which allows to obtain fertilizers, so to speak, tailored to every type of soil, 10 and plant climate, solving some of the problems jobs pe them soils and tropical crops,

International (IPC 8-9): C05B13/00 C05B19/00 C05B21/00 (Advanced/Invention);
C05B13/00 C05B19/00 C05B21/00 (Core/Invention)
International (IPC 1-7): C05B13/00 C05B19/00 C05B21/00



Publication number	Publication date	Application number	Application date
BR8302609 A	19831129	BR19830002609	19830518

BR19830002609 19830518

Assignee(s): (std): FINEP FINANCEIRA DE ESTUDOS E ; UFPE UNIVERSIDADE FEDERAL DE P

Assignee(s): UFPE UNIVERSIDADE FEDERAL DE PERNAMBUCO ; FINEP FINANCEIRA DE ESTUDOS E PROJETOS

Inventor(s): (std): ARAO HOROWITA ; CARNEIRO MARIA OLIMPIA MEDEIRO ; DUARTE PAULO JOSE ; HOROWITA ARAO ; JULIO PACHECO MEIRA E JUNIO SA ; LEUCIO MARQUES DE ALMEIDA ; MARIA OLIMPIA MEDEIROS CARNEIR ; ALMEIDA LEUCIO MARQUES DE ; PAULO JOSE DUARTE ; SA JULIO PACHECO MEIRA E JUNIO

Inventor(s): MARIA OLIMPIA MEDEIROS CARNEIRO ; JULIO PACHECO MEIRA E JUNIOR SA ; JULIO PACHECO MEIRA E SA JUNIOR

66) Family number: 33900505 (W006125836A1)

Title: CONTROLLED-RELEASE VITREOUS PRODUCT FOR USE AS A FERTILISER

Abstract: The invention relates to a controlled-release vitreous product which is characterised in that it comprises boron oxide (III) and at least one oxide of a transition metal selected from among iron, manganese, zinc, copper, molybdenum and mixtures of same. The method used to obtain said product is characterised in that it comprises the following steps consisting in: mixing the components, melting the mixture at a temperature varying between 800 and 1500 Degrees C, cooling the molten mixture such that it solidifies, grinding the solidified molten mixture, and, optionally, incorporating the vitreous product obtained into a support. The release of the components from the vitreous product under the action of water and other factors is controlled by the composition and production method thereof. In this way, the invention is suitable for use as an agricultural fertiliser.

Classifications:

International (IPC 8-9): C03C3/064 C05D9/02 (Advanced/Invention);
C03C3/062 C05D9/00 (Core/Invention)

CPC: C03C3/066 C03C4/0035 C03C10/0009 C03C10/0054 C05D9/02 C05G3/0047
European: C03C10/00B C03C10/00K C03C3/066 C03C4/00D C05D9/02 C05G3/00B4

Family:

Publication number	Publication date	Application number	Application date
WO06125836 A1	20061130	WO2005ES00303	20050527

Priority:

WO2005ES00303 20050527

Probable Assignee: COLOROBIA ESPANA SA

Assignee(s): (std): CARCELLER MARTINEZ JOSE VICENT ; COLOROBIA ESPANA SA ; NEBOT APARICI ANTONIO ; SERENI SERGIO

Assignee(s): CARCELLER MARTINEZ JOSE VICENTE ; COLOROBIA ESPANA S A

Inventor(s): (std): CARCELLER MARTINEZ JOSE VICENT ; NEBOT APARICI ANTONIO ; SERENI SERGIO

Inventor(s): CARCELLER MARTINEZ JOSE VICENTE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

67) Family number: 65806508 (US2018332812A)

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Title: RICE GRAIN WITH THICKENED ALEURONE

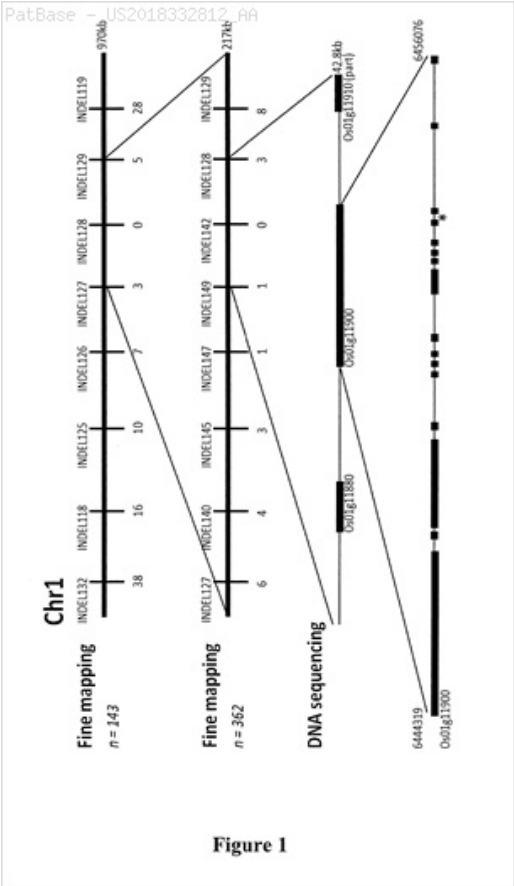
Abstract: The present invention relates to rice grain with thickened aleurone. Also provided is a rice plant comprising at least one genetic variation which reduces the activity of at least one ROS1a gene in the plant. Grain of the invention, or aleurone therefrom, has improved nutritional properties, and hence is particularly useful for human and animal feed products.

Classifications:

International (IPC 8-9): A01H1/00 A01H1/06 A01H5/00 A01H5/10 A01H6/00 A01H6/46 A21D2/36 A23K10/30 A23L2/38 A23L2/52 A23L7/10 A23L7/109 A23L7/135 A23L7/20 C07K4/10 C12G3/00 C12G3/04 C12N15/29 C12N15/56 C12N15/82 C12N5/04 C12N5/10 C12N9/24 C12Q1/04 C12Q1/6851 C12Q1/6895 (Advanced/Invention)

International (IPC 1-7): A01H5/10 C12N9/24

CPC: C12N9/2497 C12N15/8261 A01H6/4636 A01H6/00 A01H1/06 A23V2002/00 A23L7/115 A23K10/30 C12Q2600/13 C12Q1/6895 A01H5/10



Family:

Publication number	Publication date	Application number	Application date
AU2016355920 AA	20180621	AU20160355920	20161117
BR112018010101 A2	20181113	BR20181110101	20161117
CA3005466 AA	20180516	CA20163005466	20161117
CN108882691 A	20181123	CN201680072009	20161117
CO20180006215 A2	20180831	CO20180006215	20180615
EP3376852 A1	20180926	EP20160865304	20161117
EP3376852 A4	20190417	EP20160865304	20161117
ID201810012 A	20180914	ID2018P0004280	20161117
IN201817022280 A	20181026	IN201817022280	20180614
JP2018535680 T2	20181206	JP20180526629T	20161117
KR20180109859 A	20181008	KR20187017166	20161117
MX2018006192 A1	20181219	MX20180006192	20161117
PH2018501071 A	20190128	PH20180501071	20180517

SG11201804169Q A1	20180628	SG20181104169	20161117
TW201722264 A	20170701	TW20160137863	20161118
US2018332812 AA	20181122	US20160777059	20161117
WO17083920 A1	20170526	WO2016AU51106	20161117

Priority:

AU20150904754 20151118 WO2016AU51106 20161117

Probable Assignee: OF BOTANY CHINESE ACADEMY OF SCIENCES INST

Assignee(s): (std): COMMW SCIENT AND INDUSTRIAL RESEARCH ORGANISATION ; COMMW SCIENT IND RES ORG ; OF BOTANY CHINESE ACADEMY OF SCIENCES INST ; INST OF BOTANY CHINESE ACAD OF SCIENCES ; INST OF BOTANY CHINESE ACADEMY OF SCIENCES ; INST OF BOTANY OF CHINESE ACADEMY OF SCIENCES

Assignee(s): YU RONALD CHUN WAI ; WU XIAO BA ; OF BOTANY OF CHINESE ACADEMY OF SCIENCES INST ; LARKIN PHILIP JOHN ; LIU CHUN MING ; LIU JINXIN ; COMMW SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION ; HOWITT CRISPIN ALEXANDER

Inventor(s): (std): HOWITT CRISPIN ALEXANDER ; LARKIN PHILIP JOHN ; LIU CHUN MING ; LIU JINXIN ; PHILIP JOHN ; WU XIAO BA ; YU RONALD CHUN WAI ; YU RONALD CHU WAI ; LIU JIN XIN ; XIAO BA WU ; RONALD CHUN WAI YU ; PHILIP JOHN LARKIN ; JINXIN LIU ; CRISPIN ALEXANDER HOWITT ; CHUN MING LIU

Agent(s): FB RICE PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; WISE DANIEL JOSEPH; ARIFIA JAUHARIA FAJRA ST SH; AOKI ATSUSHI; FB RICE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

68) Family number: 20295510 (US5308373A)

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Title: METAL AMMONIUM PHOSPHATE-ALKYLENE UREA BUFFERED FERTILIZER

Abstract: A method of preparing a new granular homogeneous metal ammonium phosphate-alkylene urea buffered fertilizer, containing slow releasing water insoluble nitrogen of two types which provide sustained nitrogen release. The method is based on the discovery that a strong metal ammonium phosphate matrix may be formed to homogeneously contain fine particles of alkylene urea compounds. The new buffered fertilizer provides concentrated slow release nitrogens, and phosphate, and buffering amounts of metal nutrients. The alkylene urea may be formed in-situ from liquids concomitantly with the formation of the metal ammonium phosphates, or it may be admixed as finely divided alkylene urea solids. The preferred alkylene ureas are methylene ureas and polymers, isobutylene diurea, and crotonylidene diurea. The metal nutrients are divalent and are preferably magnesium, manganese, zinc, and iron reacted as oxides, hydroxides, or carbonates. The ammonium ion is supplied in the method as anhydrous ammonia, ammonium hydroxide, and preferably as ammonium phosphate. The phosphate is supplied as phosphoric acids, ammonium phosphate, or preferably as a combination of phosphoric acid and ammonium phosphate. The method is most effectively carried out in a high intensity mixer-reactor, comprising a cylindrical pan rotating around a near-vertical center containing a smaller diameter mixer rotating at a high rate of speed relative to that of the pan. The magnesium, ammonium, and phosphorous entities are reacted at about a mol ratio of 1.0 to 1.0 to 1.0 at about the boiling point of water, and at about atmospheric pressure to form a new fertilizer composition containing between 14 and 30 percent nitrogen with between 40 and 80 percent of the nitrogen insoluble in cold water and buffered to a pH between 6.0 and 8.0.

Classifications:

International (IPC 8-9): C05B7/00 C05C9/00 C05C9/02 C05D5/00 C05D9/02 C05G1/00 C05G5/00 (Advanced/Invention); C05C9/00 C05D5/00 C05G1/00 (Advanced/Non-invention); C05B7/00 C05C9/00 C05D5/00 C05D9/00 C05G1/00 (Core/Invention)

International (IPC 1-7): C05B7/00 C05C9/00 C05C9/02 C05D5/00 C05D9/02 C05G1/00 C05G5/00

CPC: Y02P60/212 C05B7/00

European: C05B7/00

US: 71/29 71/30 71/64.11

PatBase - NZ261245_A

END

Family:

Publication number	Publication date	Application number	Application date
AU199459914 A1	19940815	AU19940059914	19940104
AU672483 B2	19961003	AU19940059914	19940104
CA2152612 AA	19950623	CA19942152612	19940104
CA2152612 C	20000711	CA19942152612	19940104
EP0678084 A1	19951025	EP19940906028	19940104
EP0678084 A4	19980325	EP19940906028	19940104
IL108143 A0	19940412	IL19930108143	19931222

IL108143 A1	19970318	IL19930108143	19931222
JP8505356 T2	19960611	JP19940516167T	19940104
NZ261245 A	19960227	NZ19940261245	19940104
PH31087 A	19980205	PH19930047566	19931228
US5308373 A	19940503	US19930002272	19930108
WO9415891 A1	19940721	WO1994US00113	19940104

Priority:

US19930002272 19930108 WO1994US00113 19940104

Probable Assignee: AGRI NUTRIENTS TECHNOLOGY GROUP INC

Assignee(s): (std): VIGORO CORP

Assignee(s): LESCO TECHNOLOGIES LLC ; PNC BANK NATIONAL ASSOCIATION ; MOORE WILLIAM PERCY ; VIGORO THE CORP ; AGRI NUTRIENTS TECHNOLOGY GROUP INC ; AGRINUTRIENTS TECHNOLOGY GROUP ; AGRINUTRIENTS TECHNOLOGY GROUP INC ; IMC AGRIBUSINESS INC ; KPAC HOLDINGS INC ; LESCO INC

Inventor(s): (std): MOORE WILLIAM P ; WILLIAM P MOORE ; MOORE WILLIAM PERCY

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; DEETH WILLIAMS WALL LLP; REINHOLD COHN AND PARTNERS

Designated states: AT AU BE BR BY CA CH CZ DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO NZ PL PT RO RU SE SK UA

69) Family number: 618520 (BR8200560A)

© PatBase

Title: PROCESSO DE PRODUCAO DE FERTILIZANTE POTASSICO E DIOXIDO DE ENXOFRE PRODUCTION PROCESS OF POTASSICO FERTILIZER AND SULPHUR DIOXIDE (Machine translation)

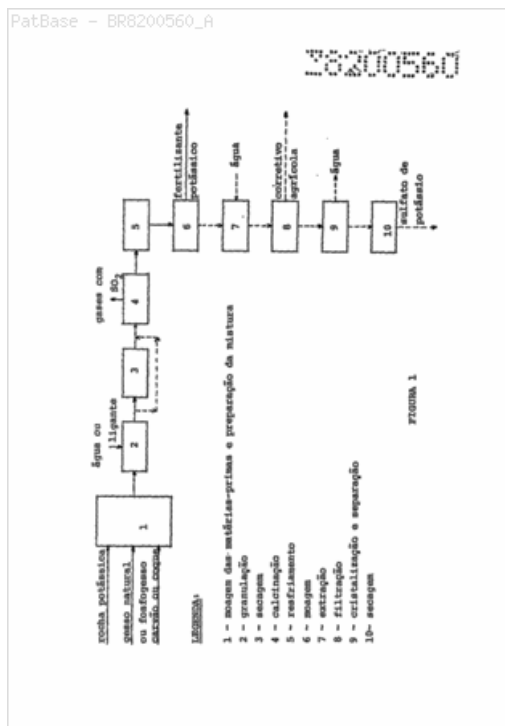
Abstract: Source: BR8200560A [PT] >•ss•••••i:: ***•••ss•e RESUMO. A Patente de Invencao "PROCESSO DE PRODUCAO DE FERTILIZANTE POTASSICO E DIOXIDO DE ENXOFRE" diz respeito a "processo de calcinacao com producao simultanea de um fertilizante, o qual contem potassio e silicatos de calcio soluveis, e de gases contendo dioxido de enxofre. O processo baseia-se na utilizacao de uma rocha potassica constituída por alumino-silicatos 10 de potassio e sodio, alem de gesso natural ou fosfogesso e de carvao (vegetal ou mineral) ou coque. Os gases contendo dioxido de enxofre1 podem ser alimentados a uma unidade produtora de acido sulfuerico por processo de contato. 15 O produto solido, podendo conter ate 15 percent de KgO, pode ser moído e vendido como fertilizante potassico (o qual, devido a presenca de silicatos de calcio soluveis, tem acao condicionante de solos) ou, alternativamente, pode ser feita uma separacao do po- 20 tassio soluvel, com producao de produto mais rico em potassio.

Machine translation: >•••••i:: ss ss ss•••ss• and summary. Invention patent "PROCESS of POTASSICO and FERTILIZER PRODUCTION ENXO DIOXIDE-FRE" refers to "calcinacao process with production-5 study of a dog, the fertilizer which contains squid sio and silicates of calcium soluveis and gaseous sulphur dioxide-conten. 0 process is based on use of a rock consisting of alumino-potassica 10 silicatos1 potassium and sodium, in addition to natural or plaster and fosfogesso of coal (vegetable or mineral) or bun. enxofre1 dioxide-containing gases can be fed to a production unit of sulfuerico by acid contact process. 15 the solid product, and may contain up to 15 percent of KgO, can be ground and sold as fertilizer potassico (which, due to the presence of calcium silicates soluveis, has influence soil conditioning) or, Alternatively, can be made a partition of po-20 Angel soluvel, with more product production in Rico potassium.

Classifications:

International (IPC 8-9): C05D1/00 (Advanced/Invention); C05D1/00 (Core/Invention)

International (IPC 1-7): C05D1/00



Family:

Publication number	Publication date	Application number	Application date
BR8200560 A	19831004	BR19820000560	19820201

Priority:

BR19820000560 19820201

Probable Assignee: INST PESQUISAS TECH

Assignee(s): (std): INST DE PESQUISAS TECNOLOGICAS ; INST PESQUISAS TECH

Assignee(s): INSTITUTO DE PESQUISAS TECNOLOGICAS DO ESTADO DE SAO PAULO S A IPT

70) Family number: 10610534 (SE514812C)

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Title: FERTILISER PREPARED FROM SLUDGE OR ORGANIC WASTE

Abstract: Fertiliser or mineralisation agent added to an ecological cycle and prepared from byproducts and residues which contain e.g. calcium, phosphorous, potassium and nitrogen, contains biofuel ash with a cadmium content 2 (preferably 1.5) ppm. Preparation of the fertiliser (claimed) involves heating the fly ash to reduce the cadmium content and reacting a chemical solution with the volatile cadmium to form poorly soluble compounds. Preferably granules or pellets of the fertiliser are coated with water glass or wood resin. Recovered ammonium nitrate is blended with a mixture of sludge and reduced cadmium content fly ash.

Classifications:

International (IPC 8-9): C05D9/00 (Advanced/Invention);

C05D9/00 (Core/Invention)

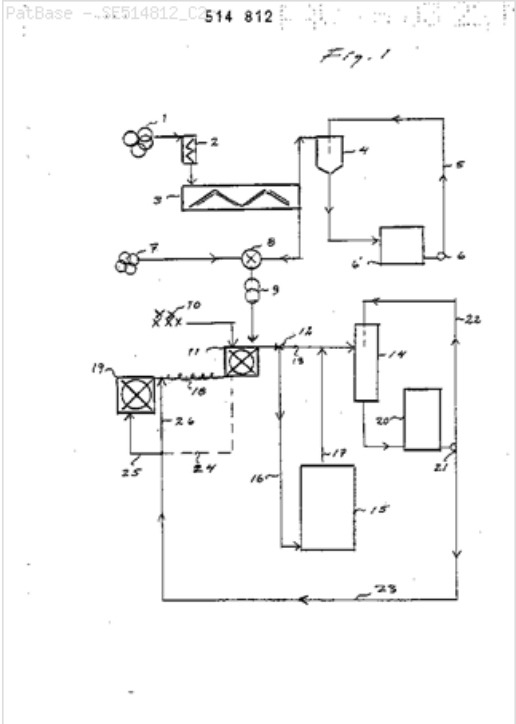
International (IPC 1-7): C05D9/00 C05F7/00 C05G1/00

CPC: C05D9/00 C02F11/00 C05F7/00 C05F17/0063 C05F17/009

C05G1/00

European: C02F11/00 C05D9/00 C05F17/00M C05F17/00V

C05F7/00 C05G1/00



Family:

Publication number	Publication date	Application number	Application date
SE514812 C2	20010430	SE19960001100	19960321
SE9601100 A	19970922	SE19960001100D	19960321
SE9601100 A0	19960321	SE19960001100	19960321
SE9601100 L	19970922	SE19960001100	19960321

Priority:

SE19960001100 19960321

Probable Assignee:

LINDAHL ARNE

Assignee(s): (std):

LINDAHL ARNE

Assignee(s):

ARNE LINDAHL

Inventor(s): (std):

LINDAHL ARNE

Inventor(s):

ARNE LINDAHL

71) Family number: 50831540 (WO13108041A2)

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Title: IMPROVED MATERIALS

Abstract: The present invention relates to methods for the treatment of contaminated material and to products obtained by such methods and to the use thereof. In one embodiment the process for the treatment of the contaminated material comprises: (i) treating the contaminated material with an acidic composition; and (ii) treating the resultant mixture with an alkaline composition.

Classifications:

International (IPC 8-9): B09B3/00 B09B5/00 (Advanced/Invention)

CPC: B09B3/00 B09B5/00

Family:

Publication number	Publication date	Application number	Application date
DE602013040757 D1	20180823	DE201360040757T	20130118
DK2804703 T3	20181008	DK20130702092T	20130118
EP2804703 A2	20141126	EP20130702092	20130118
EP2804703 B1	20180725	EP20130702092	20130118
ES2687972 T3	20181030	ES20130702092T	20130118
GB201200877 A0	20120229	GB20120000877	20120119
GB201202621 A0	20120328	GB20120002621	20120215

GB201414506 A0	20141001	GB20140014506	20130118
GB201721211 A0	20180131	GB20170021211	20130118
GB2514940 A1	20141210	GB20140014506	20130118
GB2514940 B2	20180314	GB20140014506	20130118
GB2554624 A1	20180404	GB20170021211	20130118
GB2554624 B2	20181107	GB20170021211	20130118
PL2804703 T3	20181231	PL20130702092T	20130118
TR201813367 T4	20181022	TR20180013367T	20130118
WO13108041 A2	20130725	WO2013GB50115	20130118
WO13108041 A3	20131003	WO2013GB50115	20130118

Priority:

GB20120000877 20120119 GB20120002621 20120215 EP20130702092 20130118
WO2013GB50115 20130118 GB20140014506 20130118

Probable Assignee: POWER MINERALS LTD

Assignee(s): (std): BIOLITE TECHNOLOGIES LTD ; POWER MINERALS LTD

Assignee(s): POWER MINERALS LTD SUTTON COLDFIELD ; BIOLITE TECHNOLOGIES LIMITED

Inventor(s): (std): DRURY LES ; GAY MIKE ; CARSON JOHN WILLIAM ; MIKE GAY ; LES DRURY ; JOHN WILLIAM CARSON

Agent(s): HERNANDEZ YORCK DIPL ING; SCHLICH GEORGE; IZQUIERDO MARIA ALICIA; FILIZ ARK; JOHNSON GRAHAM PIERSENE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

72) Family number: 54700549 (WO14036983A3)

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Title: METHOD AND PLANT FOR RECOVERING MATERIAL AND/OR ENERGY FROM PHOSPHORUS-CONTAINING WASTE
PROCEDE ET INSTALLATION POUR VALORISER LA MATIERE ET/OU L'ENERGIE DE DECHETS CONTENANT DU PHOSPHORE

Abstract: The invention relates to a method and a plant for recovering material and energy from phosphorus-containing waste by means of an air-assisted smelting-gasification and/or oxygen-assisted smelting-gasification process in metallurgical shaft furnaces. In said method, the phosphorus and/or phosphorous compounds reaching the gas phase in metallurgical shaft furnaces during the method-specific recovery of material and energy from phosphorus-containing waste by means of air-assisted and/or oxygen-assisted smelting-gasification can be easily separated and be used for metallurgical material recycling processes without having to go through a complex wet gas purification process combined with an integrated quenching step to obtain cooling to about 5 degrees centigrade, e.g. because of organic residues contained in the waste.

Classifications:

International (IPC 8-9): B01D46/18 B01D53/00 B09B3/00 C02F11/06 C05F7/00 C10J3/08 C21B7/00 F23G7/00 F23J15/02 F27B1/16 (Advanced/Invention)

CPC: F23G7/001 F23J15/022 B09B3/0083 C05B5/00 C05D3/04 Y02W10/40 Y02W30/20 Y02W10/30

Family:

Publication number	Publication date	Application number	Application date
CA2877061 AA	20141217	CA20132877061	20130703
DE102012014357 B3	20130905	DE201210014357	20120719
DE502013008150 D1	20171005	DE201350008150T	20130703
DK2874763 T3	20171204	DK20130747778T	20130703
EP2874763 A2	20150527	EP20130747778	20130703
EP2874763 B1	20170823	EP20130747778	20130703
ES2647616 T3	20171222	ES20130747778T	20130703
WO14036983 A2	20140313	WO2013DE000354	20130703
WO14036983 A3	20140508	WO2013DE000354	20130703

Priority:

DE201210014357 20120719 EP20130747778 20130703 WO2013DE000354 20130703

Probable Assignee: MALLON JOACHIM DIPL PHYS

Assignee(s): (std): MALLON JOACHIM ; SCHAAF MICHAEL

Assignee(s): SCHAAF MICHAELALTE DORFSTRASSE 504178LEIPZIGDE ; MALLON JOACHIM DIPL PHYS ; MALLON JOACHIMVERLANGERTE SCHWEDENSTRASSE 3604158LEIPZIGDE

Inventor(s): (std): SCHAAF MICHAEL ; MALLON JOACHIM

Inventor(s): MALLON JOACHIMVERLANGERTE SCHWEDENSTRASSE 3604158LEIPZIGDE ; SCHAAF MICHAELALTE DORFSTRASSE 504178LEIPZIGDE

Agent(s): MARKS AND CLERK; BECKORD AND NIEDLICH PATENTANWALTE PARTG MBB; BECKORD AND NIEDLICH; ELZABURU SLP ELZABURU SLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

73) Family number: 17989555 (DE19641247A1)

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Title: USE OF HUMIC ACID AND ITS SALTS AS CATALYST OR SORBENT

Abstract: Use of humin in the form of humic acid or its salts, by converting it with redox catalysts or fermentation media using films or membranes impregnated with microorganisms, is new. The product is used for one of the following processes:
(a) as a catalyst or sorbent for abiotic hydrolysis and/or oxidation of chalcogenic sulphur or selenium compounds in the

gaseous phase in the presence of free and/or capillary condensed aqueous and/or polar and/or salt-containing fluid phases, to form \- 1 of the compounds, chalcogen hydrogen, elementary chalcogen, poly-chalcogenide, thionate, polythionate, chalkogenite or chalcogenate; (b) as a catalyst for abiotic oxidation of \- 1 compound containing sulphite, thiosulphate or polythionate groups, where the compounds are dissociated or undissociated in the aqueous phase; (c) abiotic oxidation of compounds containing hydrogen and \- 1 of the element phosphorus, arsenic or antimony in the presence of free and/or capillary condensed aqueous and/or polar and/or salt-containing fluid phases, to form \- 1 compound containing these elements and oxygen; (d) abiotic phosphine hydrolysis; (e) abiotic oxidation and/or sorption of \- 1 element or compound containing iodine, precious metals, mercury or zinc in the gaseous or aqueous phase; (f) heavy metal precipitation in the presence of sulphur or a sulphur compound, to produce a heavy metal sulphide; (g) abiotic and/or biotic reduction of nitro-organic, halo-organic or oxyran-organic compounds in the presence of free, capillary condensed aqueous, polar and/or salt-containing fluid phases; (h) biotic decomposition of the surface layer of sewage during water purification; (i) biotic oxidation of sulphide-containing ores or sulphides to give the corresponding heavy metal sulphates; (j) biotic decomposition of organic impurities in water or soil; (k) biotic decomposition of microorganisms on the surface of plant roots or fungal mycelia or hyphae in water or soil; (l) for street cleaning; (m) for the care of plants and/or fungal cultures (i.e. as a fertiliser); (n) as a fertiliser for plants/fungi, with the addition of root and/or mycelium and/or mycorrhiza substrate, and (o) for the abiotic decomposition of pollutants, when used in combination with \- 1 other anti-pollutants. Also claimed are coagulated particle agglomerates useful as flow-release fertilisers, these are made from coagulated humic acid.

Classifications:

International (IPC 8-9): B01J20/24 C05F11/02 C07G99/00 (Advanced/Invention);
C02F1/28 C02F1/62 C02F1/70 C02F1/72 C02F11/14 C02F3/28 C02F3/32 (Advanced/Non-invention);
B01J20/22 C05F11/00 C07G99/00 (Core/Invention);
C02F1/28 C02F1/62 C02F1/70 C02F1/72 C02F11/14 C02F3/28 C02F3/32 (Core/Non-invention)
International (IPC 1-7): A62D3/00 B01J20/24 B01J31/06 C02F1/28 C02F1/56 C02F1/58 C02F1/62 C02F11/00 C04B18/02
C05F11/02 C05F7/00 C07G17/00 C23F11/00
CPC: Y02W10/37 B01J20/24 C02F1/286 C02F1/62 C02F1/70 C02F1/72 C02F3/286 C02F3/32 C02F11/14 C02F2101/16
C02F2101/20 C02F2101/36 C05F11/02 C07G17/00
European: B01J20/24 C05F11/02 C07G17/00 M02F1/28H M02F1/62 M02F1/70 M02F1/72 M02F101/16 M02F101/20
M02F101/36 M02F11/14 M02F3/28S M02F3/32

Family:

Publication number	Publication date	Application number	Application date
DE19641247 A1	19970724	DE19961041247	19961007

Priority:

DE19961002096 19960122	DE19961004496 19960208	DE19961004497 19960208
DE19961004498 19960208	DE19961014178 19960411	DE19961019772 19960518
DE19961025205 19960625	DE19961041247 19961007	

Probable Assignee: OESTE FRANZ DIETRICH DIPL ING

Assignee(s): (std): OESTE FRANZ DIETRICH DIPL ING

Assignee(s): OESTE FRANZ DIETRICH DIPL ING 35274 KIRCHHAIN DE

Inventor(s): (std): BUCHHOLZ OESTE SIEGRUN ; OESTE FRANZ DIETRICH

Inventor(s): OESTE FRANZ DIETRICH 35274 KIRCHHAIN DE ; BUCHHOLZ OESTE SIEGRUN 35274 KIRCHHAIN DE

74) Family number: 1684564 (DE2758010A1)

© PatBase

Title: SOLID FERTILIZER PRODN. FROM WASTE WATER TREATMENT SLURRY - COAGULATED WITH GROUND ROCK, MIXED WITH FERTILIZER SALTS THEN DRIED

Abstract: Solid, spreadable complete fertiliser for biological soil conditioning and improving plant yields consists of sterile, granulated organic slurry (A) from biological waste water treatment plants which has been coagulated with ground primitive rock (B). Inorganic fertiliser salts are then added to prevent rotting and the compsn. dried. Pref. (B) has grain size 0-500, esp. 0.1-100 mu and is esp. derived from basalt or slate. The wt. ratio (B): dry matter in (A) is 0.1:1-10:1, esp. 1:1. The fertiliser salts are 1:1. The fertiliser salts are 10-25 weight percent (on dried granulate) and esp. comprise an NPK fertiliser also contg. Ca, Mg and trace elements. They are added as soln., suspension or powder. Compsn. is suitable for use in agriculture, horticulture or forestry. The compsn. is applied easily and feeds not only the plants but also the symbiotic soil flora and fauna. (B) is a very effective coagulant for slurry without altering the pH or introducing soluble components into the slurry.

Classifications:

International (IPC 8-9): C05F7/00 (Advanced/Invention);
C05F7/00 (Core/Invention)

International (IPC 1-7): C05F9/04 C05G3/04

CPC: Y02A40/213 C05F7/00

European: C05F7/00

Family:

Publication number	Publication date	Application number	Application date
DE2758010 A1	19790705	DE19772758010	19771224

Priority:

DE19772758010 19771224

Probable Assignee: HOECHST AG

Assignee(s): (std): HOECHST AG

Inventor(s): (std): MEHLO WALTHER DR

75) Family number: 24941565 (GB279421A)

© PatBase

Title: An improved process for producing an alkaline-reacting nitrogen fertiliser

Abstract: 279,421. Caro, N., and Frank, A. R. Oct. 23, 1926, [Convention date]. Manures.-An alkaline-reacting fertilizer consisting of granular calcium cyanamide is obtained by passing ammonia over calcium carbonate, or mixed carbonates such as dolomite broken up to the size of millet seed or peas and heated to 500-900 C. The reaction may be carried out under ordinary or increased pressure.

Classifications:

International (IPC 8-9): C05C3/00 C05C7/02 (Advanced/Invention)

International (IPC 1-7): C05C7/00

CPC: C05C3/00 C05C7/02
European: C05C3/00 C05C7/02

Family:

Publication number	Publication date	Application number	Application date
GB279421 A	19281115	GB19270025891	19270930

Probable Assignee: ALBERT RUDOLPH FRANK
Assignee(s): (std): ALBERT RUDOLPH FRANK ; NIKODEM CARO

76) Family number: 62468572 (WO16077875A1)

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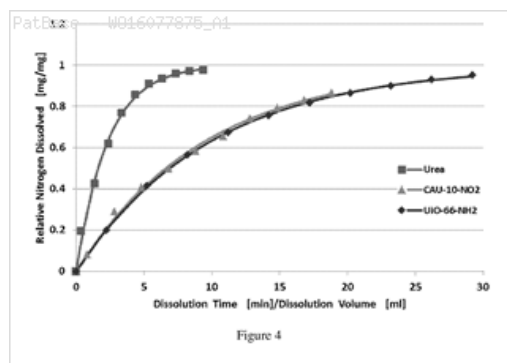
Title: FERTILISER COMPOSITION

Abstract: The present invention provides a controlled release fertiliser composition comprising metal organic framework (MOF), the MOF incorporating within its framework fertiliser.

Classifications:

International (IPC 8-9): C05G3/04 C09K17/40 (Advanced/Invention)

CPC: C05C1/00 C05C9/005 C05D9/00



Family:

Publication number	Publication date	Application number	Application date
WO16077875 A1	20160526	WO2015AU50680	20151029

Priority:

AU20140904604 20141117

Probable Assignee: COMMW SCIENT IND RES ORG

Assignee(s): (std): COMMW SCIENT IND RES ORG

Assignee(s): COMMW SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

Inventor(s): (std): HILL MATTHEW ROLAND ; KONSTAS KRISTINA ; SCHULTE ANDREAS

Agent(s): DAVIES COLLISON CAVE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

77) Family number: 20417577 (GB448019A)

© PatBase

Title: Manufacture of fertilisers

Abstract: Fertilizers are obtained from aluminiferous silicates, such as natural alkali or alkaline earth aluminium hydrosilicates or alkali or alkaline earth silicates or mixtures thereof, by treating them with phosphoric or nitric acid or another acid whose anion possesses fertilizer action to decompose them into colloidal ingredients and amorphous compounds, the free acid being then neutralized or, if desired, the compounds of silicic acid and phosphoric acid being then decomposed to obtain a product which is converted into a form which can be sprinkled. Suitable acid-neutralizing substances are caustic potash, ammonia, peat or lignite. The reactions may be carried out at raised temperature and/or pressure. Before or during the reaction compounds of titanium, germanium or manganese may be added, for example in the form of titanium dioxide, titanium clay, germanium dioxide, anthracite ashes or flue dust. Clay containing germanium or titanium clay may be used as a starting material. Other fertilizer salts may be added to the finished product or after the acid treatment.

Classifications:

International (IPC 8-9): C05B7/00 (Advanced/Invention);

C05B7/00 (Core/Invention)

International (IPC 1-7): C05D9/00

CPC: C05B7/00

European: C05B7/00 C05B7/00+C1/00+C5/02+D9/00

Family:

Publication number	Publication date	Application number	Application date
GB448019 A	19350225	GB19340024464	19340824

Priority:

GB19340024464 19340824

Probable Assignee: RES TRUST LTD

Assignee(s): (std): RES TRUST LTD

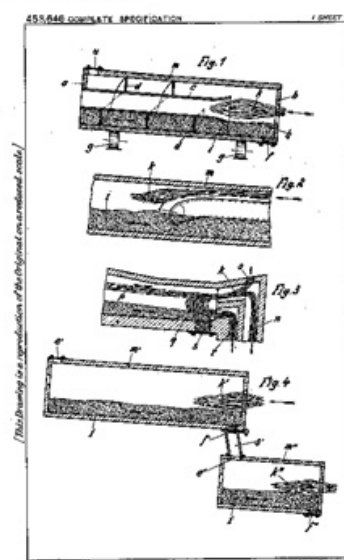
Assignee(s): RESEARCH TRUST LIMITED

Title: IMPROVEMENTS IN THE TREATMENT OF RAW PHOSPHATES

Abstract: In decomposing raw phosphates by heat treatment at above 1000 DEG C. in the presence of silica, but in the absence of alkalis, whilst scouring with gases containing steam, the fluorine containing-waste gases are carried off from the main reaction zone, and further contact with the material to be or being decomposed is avoided. The production of an undesirable easily-fusible enamel-like compound from the silicon fluoride of the gases and the lime of the phosphate is thereby avoided. In Fig. 1, the phosphate is fed through orifice e through an inclined rotary retort m, and is heated at one end by a powdered coal, oil or gas flame k. Fluorine-containing gases are drawn off through a tube c secured on struts d. The phosphate is preheated by this tube. The phosphate may be fed to the retort through tube c, the gases being withdrawn on the outside of this tube. Fans may be disposed at the end a of the retort. The decomposed material is discharged at orifice f. In another retort, a cooled suction pipe enters in the same direction as, and immediately below, the flame. In Fig. 3, powdered coal or gas n and air o produce the flame k. The lower part q contacting with the material is sucked back by fans through outlet r, carrying with it the fluorine escaping from the decomposing material. The decomposed material is discharged at orifice s. In a modification, the firing of the retort may be so controlled and the main reaction zone may be moved so far in the direction of the gas outlet that the temperature is higher than that at which fluorine is reabsorbed by the material. The hot gases, after removal of fluorine by treatment with basic substances, may be used for preheating the charge. In Fig. 4, the material is preheated in a retort m<1>, care being taken that no sintering occurs. Fluorine is removed to some extent in this retort. The material passes through a short channel 8<1> to a second retort m<11>, wherein the temperature is maintained above that at which fluorine is absorbed. The material may be preheated by means of a travelling grate similar to that used in the Dwight-Lloyd method. The reaction mixture should be finely ground, for instance, to pass through a 2500 mesh sieve, or even so as to leave a 10 per cent residue on a 10,000 mesh sieve. Grain sizes of 0,3 mm. or over are also referred to. The total amount of silica present should not be less than 15 per cent and may amount to one third of the phosphate. Up to 15 per cent of sulphuric, nitric, hydrochloric or phosphoric acid or an acid calcium phosphate may be added. When a product having a composition $5\text{CaO} \cdot \text{P}_2\text{O}_5 \cdot \text{SiO}_2$ is desired, lime may be added. Heating is preferably effected in two operations, first at 1000--1200 DEG C., then at 1300--1450 DEG C. The product is soluble in citric acid and ammonium citrate. The Specification as open to inspection under Sect. 91 comprises also melting of the furnace charge at 1600--1650 DEG C. The melt is cooled by allowing it to fall in drops into a sheet metal chamber. The mixed charge may be wet ground. Precipitated silicic acid, clay, kaolin, blast furnace slag, sand or quartz are specified as sources of silica. This may, however, be replaced by compounds of aluminium, iron, titanium, boron, molybdenum, chromium, vanadium, nickel, and c., producing volatile fluorides. Aluminium fluoride subliming, for example, may be used in the ceramic industry, or for producing artificial cryolite. An oxyhydrogen or acetylene flame may be employed. The reaction mixture may be admixed with powdered coal and blown into the flame. If the fluorine-containing waste gases are allowed to contact with the material to be decomposed, the fluorine concentration is reduced by dilution with inert gases, or by removal with basic absorbents. Basic substances specified for extraction of fluorine from the gases are slaked lime, sodium hydroxide and alumina. This subject-matter does not appear in the Specification as accepted.

Classifications:**International (IPC 8-9):** C05B13/02 D05C13/00 (Advanced/Invention)**International (IPC 1-7):** C05B13/02**CPC:** C05B13/02 D05C13/00**European:** C05B13/02 D05C13/00

PatBase - GB453646_A

**Family:**

Publication number	Publication date	Application number	Application date
GB453646 A	19360911	GB19350004346	19350211

Priority:

GB19350004346 19350211

Probable Assignee: KAISER WILHELM INST F EISENFORSCHUNG EV**Assignee(s):** (std): KAISER WILHELM INST F EISENFORSCHUNG EV ; KAISER WILHELM INST FUER EISEN**Assignee(s):** KAISER WILHELM INSTITUT FUER EISENFORSCHUNG E V ; KAISER WILHELM INST F EISEN**Title:** EMULSION EXPLOSIVE

Abstract: An emulsion explosive composition comprising an emulsion explosive and a heave agent. In the context of the present invention, the heave agent is a compound, or mixture of compounds, which is capable of reducing the overall relative effective energy of the emulsion explosive but which, on combustion/detonation, yields gaseous products. Examples of suitable heave agents include inorganic ammonium compounds, organic ammonium compounds, amino acids and non-ammonium containing amides, carbonates and nitrates.

Classifications:

International (IPC 8-9): C06B31/28 C06B45/00 C06B47/00 C06B47/14 (Advanced/Invention);
C06B31/00 C06B45/00 C06B47/00 (Core/Invention)
International (IPC 1-7): C06B31/28 C06B45/00
CPC: C06B47/00 C06B47/145
European: C06B47/00 C06B47/14B

Family:

Publication number	Publication date	Application number	Application date
 AU105299 A0	19990708	AU1999PQ01052	19990618
 AU200052010 A1	20010109	AU20000052010	20000616
 AU200052010 A5	20010109	AU20000052010D	20000616
 BRPI0012295 A	20020326	BR2000PI12295	20000616
 CA2375223 AA	20011214	CA20002375223	20000616
 CN1368944 A	20020911	CN20008011312	20000616
 WO0078694 A1	20001228	WO2000AU00682	20000616

Priority:

AU1999PQ01052 19990618 AU20000052010 20000616 WO2000AU00682 20000616

Probable Assignee: ORICA AUSTRALIA PTY LTD

Assignee(s): (std): NOY MICHAEL ; ORICA AUSTRALIA PTY LTD ; ORICA EXPLOSIVES TECH PTY LTD ; ORICA EXPLOSIVES TECHNOLOGY PTY LTD ; SUJANSKY VLADIMIR

Assignee(s): ORICA EXPLOSIVES TECHNOLOGY PTY LIMITED

Inventor(s): (std): M NOY ; NOY M ; NOY MICHAEL ; SUJANSKY V ; SUJANSKY VLADIMIR ; V SUJANSKY

Inventor(s): VLADIMIR SUJANSKY ; MICHAEL NOY

Agent(s): DAVIES COLLISON CAVE PTY LTD; KIRBY EADES GALE BAKER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

80) Family number: 7453608 (DE3742641A1) © PatBase

Title: ECOLOGICAL AND BIOLOGICAL FERTILISER CONCENTRATE FROM ANIMAL-DERIVED WASTE MATERIAL

Abstract: Source: DE3742641A1 [DE] (Claim 1) 1. dadurch gekennzeichnet, dass nur reine TS-Trockensubstanzen ohne Streuteile verarbeitet werden und die Feststoffe von der Fluessigphase weitgehend getrennt werden,

Machine translation: (Claim 1) 1 characterized in that only pure TS-dry substances are processed without scatter fractions and the solids are separated from the liquid-phase largely

Classifications:

International (IPC 8-9): C05F3/00 (Advanced/Invention);
C05F3/00 (Core/Invention)

International (IPC 1-7): C05F3/00 C09K17/00

CPC: C05F3/00 Y02P20/145 Y02A40/205

European: C05F3/00

Family:

Publication number	Publication date	Application number	Application date
 DE3742641 A1	19890629	DE19873742641	19871216

Priority:

DE19873742641 19871216

Probable Assignee: LINDEMANN ROLF W

Assignee(s): (std): LINDEMANN ROLF W

Inventor(s): (std): HALAMA ALOYS PROF DR ; LINDEMANN ROLF W

Inventor(s): W LINDEMANN ROLF ; HALAMA ALOYS PROFDR

81) Family number: 67013639 (US2019100459A) © PatBase

Title: COMPOSITION CONTAINING MODIFIED CHROMATE-DEFICIENT RED MUD AND METHOD FOR PRODUCING SAME

Abstract: The invention relates to a composition which contains modified chromate-deficient red mud, comprising a mineral composition of-10 to 50 weight percent of iron compounds,-12 to 35 weight percent of aluminum compounds,-5 to 17 weight percent of silicon compounds,-2 to 10 weight percent of titanium dioxide,-0.5 to 6 weight percent of calcium compounds,-0 to 1 ppm of chromium (VI) compounds, and-optionally additional unavoidable impurities. The composition, in particular the modified chromate-deficient red mud, contains a poorly soluble reducing agent for Cr(VI). In this manner, an inexpensive chemical composition is provided in particular as an iteratively functioning long-term adsorbent for pollutants in liquid, gaseous, and solid milieu. The invention further relates to a method for producing same and to uses thereof.

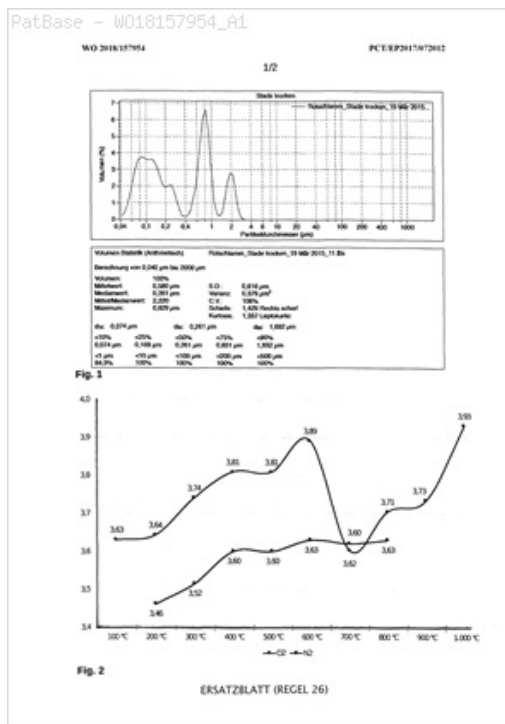
Classifications:

International (IPC 8-9): A61L9/16 A62D1/00 A62D3/37 B01J20/08
B01J20/10 B01J20/30 C01B33/12 C01F7/06 C02F1/28 C02F11/00
C04B C04B12/04 C04B18/02 C04B18/04 C04B20/10 C04B28/00
C04B28/06 C04B28/26 C04B40/00 C09K C09K5/14 C09K8/00
C09K8/03 E04B1/88 E04B1/92 E04B1/94 (Advanced/Invention);
C04B (Subclass/Invention)

International (IPC 1-7): C04B18/02 C04B20/10 C04B28/00
C04B28/06 C04B28/26 C04B40/00

CPC: C04B20/1055 C04B28/006 C04B28/06 C04B28/26
C04B2111/54 C09K8/032 Y02P40/165 Y02W30/91 Y02P20/13

C04B18/0409 C04B20/1066 C04B18/023 C04B20/1018
C04B40/0042 C04B2103/0094 C04B2103/0096 C04B2111/00258
C04B2111/00758 C04B2111/00862 C04B2111/1075 C04B2111/28
C04B2111/52



Family:

Publication number	Publication date	Application number	Application date
AU2016397508 AA	20181025	AU20160397508	20160315
AU2016397508 AA	20170921	AU20160397508	20160315
AU2017233442 AA	20180510	AU20170233442	20170301
AU2017233442 AA	20170921	AU20170233442	20170301
AU2017233442 AA	20180510	AU20170233442	20170301
BR112018005648 A2	20181002	BR20181105648	20170301
BR112018016047 A2	20181226	BR20181116047	20160315
CA2995773 AA	20180215	CA20172995773	20170301
CA2996331 AA	20180222	CA20162996331	20160315
CN108463445 A	20180828	CN201680075544	20160315
CN108602721 A	20180928	CN201780005085	20170301
EP3386932 A1	20181017	EP20160714766	20160315
EP3386933 A1	20181017	EP20170712036	20170301
ID201810356 A	20180921	ID2018PID01567	20170301
IL261199 A0	20181031	IL20170261199	20170301
IL261732 A0	20181031	IL20160261732	20160315
IN201827036009 A	20190215	IN201827036009	20180925
IN201827037361 A	20190503	IN201827037361	20181003
JP2018538128 T2	20181227	JP20180520129T	20160315
JP2019505455 T2	20190228	JP20180525728T	20170301
US2019100459 AA	20190404	US20160084118	20160315
WO17157406 A1	20170921	WO2016EP25025	20160315
WO17157664 A1	20170921	WO2017EP54767	20170301
WO18157954 A1	20180907	WO2017EP72012	20170901
ZA201707808 A	20180829	ZA20170007808	20171117

Priority:

WO2016EP25025 20160315 WO2017EP54767 20170301

Probable Assignee: FLUORCHEMIE GMBH FRANKFURT

Assignee(s): (std): CHRISTIAN ROCKTASCHEL ; FLUORCHEMIE GMBH FRANKFURT

Assignee(s): ROCKTASCHEL CHRISTIAN

Inventor(s): (std): ROCKTASCHEL CHRISTIAN ; CHRISTIAN ROCKTASCHEL ; ROCKTASCHEL CHRISTIAN ;
ROCKTASCHEL CHRISTIAN

Inventor(s): CHRISTIAN ROCKTASCHEL

Agent(s): TRIOLI ADRIAN MARTIN MR; ADRIAN M TRIOLI PATENT AND TRADE MARK ATTORNEY; THOMPSON
COOPER LLP; SCHAEFER MATTHIAS W; MUHAMMAD FAISAL; IAT WORLD PATENT LAW FIRM; SCHAEFER
MATTHIAS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU
ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME
MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW
SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA
ZW ZW

Abstract: The invention relates to a method for preparing a mineral melt for mineral fibres production, in particular rock wool used for thermal and/or acoustical insulation or for fire protection, stock culture substrates, reinforcement, and filtering fibres. The inventive method consists in breaking and compacting at least industrial residual materials and correction materials which are used for regulating the required composition and viscosity of the mineral melt with a bonding agent in such a way that moulded pieces can be formed and, afterwards transferred to a melting unit. The aim of said invention is to improve a method for the preparation of a mineral melt for producing rock wool in a low-cost manner optimizing properties of produced mineral fibre articles. For this purpose the components of the moulded pieces, in particular the correction materials and/or other components of a mixture are substituted at least partially by granulated combustion products, in particular ashes or slags produced by combusting lignite and/or coat-dust, waste paper or wood chips.

Classifications:

International (IPC 8-9): C03B1/00 C03B1/02 C03B3/02 C03B37/01 C03B37/02 C03B5/00 C03B5/16 C03C1/00 C03C1/02 C03C13/06 C03C3/097 (Advanced/Invention);

C03B1/00 C03B3/00 C03B37/01 C03B37/02 C03B5/00 C03C1/00 C03C13/00 C03C3/00 C03C3/076 (Core/Invention)

International (IPC 1-7): C03B1/02 C03B5/00 C03C1/00 C03C1/02 C03C13/06 C03C3/02 C03C3/097

CP: C03C3/064 C03C3/062 C03C3/097 C03C13/06 C03B1/02 C03C1/002 C03C1/026

European: C03B1/02 C03C1/00B C03C1/02F C03C13/06 C03C3/062 C03C3/064 C03C3/097

US: 65/134.8 65/475 65/482

Family:

Publication number	Publication date	Application number	Application date
AU2003283361 AA	20040607	AU20030283361	20031106
AU2003283361 AH	20040607	AU20030283361	20031106
AU2003301849 AA	20040607	AU20030301849	20031106
CA2504598 AA	20050429	CA20032504598	20031106
CA2504598 C	20150106	CA20032504598	20031106
CA2506769 AA	20050520	CA20032506769	20031106
CA2506769 C	20120228	CA20032506769	20031106
DE10352323 A1	20040715	DE20031052323	20031106
DE10352323 B4	20110915	DE20031052323	20031106
EP1558532 A1	20050803	EP20030810444	20031106
EP1558533 A2	20050803	EP20030775307	20031106
EP1558533 B1	20180110	EP20030775307	20031106
HR20050459 A2	20050831	HR20050000459	20050524
HR20050490 A2	20060228	HR20050000490	20050602
PL212681 B1	20121130	PL20030377167	20031106
PL377167 A1	20060123	PL20030377167	20031106
PL377198 A1	20060123	PL20030377198	20031106
RU2005117358 A	20060120	RU20050117358	20031106
RU2005117362 A	20060120	RU20050117362	20031106
RU2358917 C2	20090620	RU20050117362	20031106
RU2370461 C2	20091020	RU20050117358	20031106
SI1558533 T1	20180629	SI20030032567T	20031106
US2006042319 AA	20060302	US20050534009	20050505
US2006162391 AA	20060727	US20030533689	20031106
WO04041734 A1	20040521	WO2003EP12393	20031106
WO04041735 A1	20040521	WO2003EP12373	20031106
WO04041735 C1	20040701	WO2003EP12373	20031106

Priority:

DE20021052000 20021106 EP20030253600 20030606 DE20031052323 20031106
 EP20030810444 20031106 EP20030775307 20031106 WO2003EP12373 20031106
 WO2003EP12393 20031106

Probable Assignee: ROCKWOOL INT AS

Assignee(s): (std): HANSEN PETER F B ; HANSEN PETER FARKAS BINDERUP ; LEISMANN ANDREAS ; NYKIEL GUIDO ; ROCKWOOL INT ; ROCKWOOL INT A S ; ROCKWOOL MINERALWOLLE ; ROKVUL INTERNEHSHNL AS

Assignee(s): ROCKWOOL INT A SHOVEDGADEN 584DK-2640HEDEHUSENEDK ; DEUTSCHE ROCKWOOL MINERALWOLL GMBH AND CO OHG ; ROCKWOOL INT AS ; ROCKWOOL INTERNATIONAL AS ; ROKVUL INTERNEHSHNL A S

Inventor(s): (std): ANDREAS LEISMANN ; ANREAS LEISMANN ; GUIDO NYKIEL ; HANSEN PETER FARKAS ; HANSEN PETER FARKAS BINDERUP ; LEISMANN ANDREAS ; LEISMANN ANREAS ; NYKIEL GUIDO ; NIKIL GVIDO ; NIKEL GVIDO ; LJAJSMAH ANDREAS ; LEISMANN ANDREAS DR ; KHANSEN PETER FARKAS BINDERUP ; PETER FARKAS BINDERUP HANSEN ; HANSEN PETER F B

Inventor(s): PETER FARKAS HANSEN ; NIKIL' GVIDO ; HANSEN PETER FB ; NYKIEL GUIDODE ; NIKEL' GVIDO ; LEISMANN ANDREASDE ; HANSEN PETER FARKAS BINDERUPDK ; HANSEN PETER

Agent(s): GOWLING LAFLEUR HENDERSON LLP; NORTON ROSE CANADA SENCRL SRL LLP; OGILVY RENAULT LLP SENCRL SRL; GILL JENNINGS AND EVERY LLP; LOCKE LIDDELL AND SAPP LLP; DICKSTEIN SHAPIRO MORIN AND OSHINSKY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

83) Family number: 29252644 (US4661339A)

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Title: Sustained release composition

Abstract: A sustained release device which comprises a source of at least one trace chemical element incorporated in a cement and releasable therefrom on contact with an aqueous medium. A preferred cement is copper phosphate cement.

Classifications:

International (IPC 8-9): A01N25/08 A23K1/175 A61D7/00

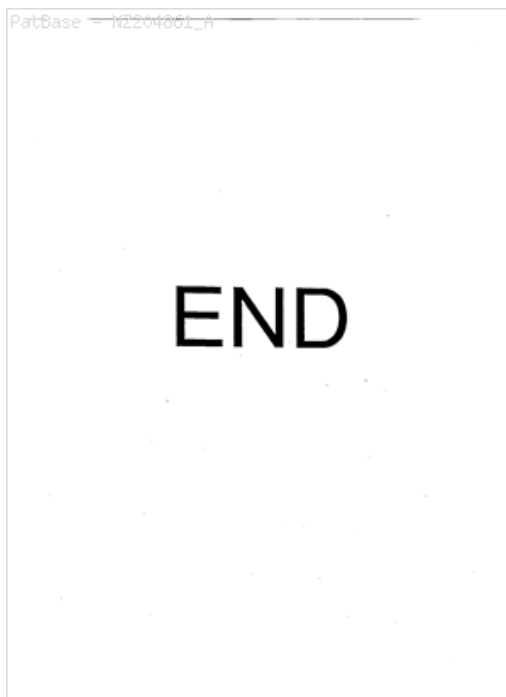
A61K33/00 A61K9/00 A61K9/18 A61K9/20 A61K9/22

A61K9/52 (Advanced/Invention);

A61K9/18 A61K9/22 A61K9/52 (Advanced/Non-invention);

A01N25/08 A23K1/175 A61D7/00 A61K9/00 A61K9/18 A61K9/20

A61K9/22 A61K9/52 (Core/Invention);
C04B (Subclass/Invention)
International (IPC 1-7): A23K1/16 A23K1/175 A61D7/00
A61K31/445 A61K33/00 A61K33/06 A61K33/18 A61K33/24
A61K33/26 A61K33/32 A61K33/34 A61K9/00 A61K9/18 A61K9/22
A61K9/26 A61K9/52 C04B C09K3/00
CPC: A01N25/08 A61K9/0068 A61K9/2009
European: A01N25/08 A61K9/00M10 A61K9/00M18G A61K9/20H2
US: 424/127 424/131 424/140 424/141 424/143 424/144 424/145
424/147 424/400 424/409 424/485 424/486 424/604 424/605
424/632 424/633 424/635 424/643 424/646 424/667 424/702
514/499 514/500



Family:

Publication number	Publication date	Application number	Application date
AU198316995 A1	19840126	AU19830016995	19830719
AU566878 B2	19871105	AU19830016995	19830719
CA1228296 A1	19871020	CA19830432742	19830719
DE3326168 A1	19840126	DE19833326168	19830720
DE3326168 C2	19930318	DE19833326168	19830720
FR2530467 A1	19840127	FR19830011915	19830719
FR2530467 B1	19860627	FR19830011915	19830719
GB2123690 A1	19840208	GB19820020969	19820720
GB2123693 A1	19840208	GB19830019304	19830718
GB2123693 B2	19870513	GB19830019304	19830718
GB8314888 A0	19830706	GB19830014888	19830531
GB8319304 A0	19830817	GB19830019304	19830718
JP1688581 C3	19920811	JP19830133565	19830720
JP3042872 B4	19910628	JP19830133565	19830720
JP59039259 A2	19840303	JP19830133565	19830720
NZ204861 A	19861008	NZ19830204861	19830711
US4661339 A	19870428	US19850707958	19850304
US4880628 A	19891114	US19870017272	19870220
ZA8308113 A	19841224	ZA19830008113	19831031

Priority:

GB19820020969 19820720 GB19830014888 19830531 US19830513774 19830714
GB19830019304 19830718 CA19830432742 19830719 ZA19830008113 19831031
US19850707958 19850304

Probable Assignee: NAT RES DEV

Assignee(s): (std): ALLEN W M ; SANSOM B F ; NATIONAL RESEARCH DEVELOPMENT CORP ; NAT RES DEV

Assignee(s): NATIONAL RES DEV CORP ; NATIONAL RESEARCH DEVELOPMENT ; NATIONAL RESEARCH DEVELOPMENT CORP LONDON GB ; WILSON ALAN D ; SANSOM BERNARD F ; PROSSER HAVARD J ; ALLEN WILLIAM M ; BRITISH TECHNOLOGY GROUP LTD ; GROFFMAN DAVID M

Inventor(s): (std): ALAN DONALD WILSON ; ALLEN W M ; ALLEN WILLIAM M ; ALLEN WILLIAM MAURICE ; ARAN DONARUDO UIRUSON ; BAANAADO FUREDERITSUKU SANSOMU ; BERNARD FREDERICK SANSOM ; DAVID MICHAEL GROFFMAN ; DEBITSUDO MAIKERU GUROFUMAN ; GROFFMAN D M ; GROFFMAN DAVID M ; GROFFMAN DAVID MICHAEL ; HAABAADO JIYON PUROTSUSAA ; HAABAADO JON PUROTSUSAA ; HAVARD JOHN PROSSER ; PROSSER H J ; PROSSER HAVARD J ; PROSSER HAVARD JOHN ; SANSOM B F ; SANSOM BERNARD F ; SANSOM BERNARD FREDERICK ; UIRIAMU MOORISU AREN ; WILLIAM MAURICE ALLEN ; WILSON A D ; WILSON ALAN D ; WILSON ALAN DONALD

Inventor(s): WILSON ALAN DONALD LIPHOOK HAMPSHIRE GB ; WILLIAM MAURICE ALLEN BERNARD FREDERICK SANSOM ALA ; WILLIAM MAURICE ALLEN BERNARD FREDERICK SANSOM... ; SANSOM BERNARD FREDERICK NEWBURY BERKSHIRE GB ; PROSSER HAVARD JOHN ROYSTON HERTFORDSHIRE GB ; JOHN PROSSER HAVARD ; MAURICE ALLEN WILLIAM ; MICHAEL GROFFMAN DAVID ; GROFFMAN DAVID MICHAEL KENTON HARROW MIDDLESEX GB ; DONALD WILSON ALAN ; FREDERICK SANSOM BERNARD ; ALLEN WILLIAM MAURICE READING BERKSHIRE GB

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BORDEN LADNER GERVAIS LLP

84) Family number: 748648 (US3607018A)

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Title: WATER-SOLUBLE POLYPHOSPHATES

Abstract: 1. A continuous, steady-state process for producing a water-soluble potassium polyphosphate essentially free of metaphosphates and chloride ion, which comprises: a. forming a slurry mixture of potassium chloride and wet-process

phosphoric acid having a P₂O₅ content between about 50 percent by weight and about 60 percent by weight and containing metallic impurities in amount less than about 5 percent by weight expressed as metal oxide, the mole ratio of the potassium chloride, expressed as metal oxide, to phosphoric acid, expressed as P₂O₅, in the mixture of potassium chloride and phosphoric acid being between about 0.75 and about 1.2; b. spraying the slurry mixture of potassium chloride and phosphoric acid in particulate slurry form into a combustion gas having a temperature of at least about 500 degrees C. to heat the mixture to and maintain said mixture at a temperature of between about 250 degrees C. and about 350 degrees C., said sprayed particulate slurry mixture having particles which have a diameter of between about 20 micrometers and about 100 micrometers; c. maintaining the temperature of the sprayed particulate slurry mixture between about 250 degrees C. and about 350 degrees C. for a period of time between about 10 seconds and about 40 seconds to form hydrogen chloride and water-soluble potassium polyphosphate essentially free of metaphosphates and chloride ion; d. separating the water-soluble potassium polyphosphate from the combustion gas containing less than about 10 percent weight hydrogen chloride; e. cooling the water-soluble potassium polyphosphate obtained in step (d) to a temperature between about 20 degrees C. and about 80 degrees C. within a period of time between about 1 second and about 10 seconds, said cooling being conducted by contacting the water-soluble potassium polyphosphate with water maintained at a pH between about 6.0 and about 7.0 with ammonia, whereby water-soluble polyphosphate is obtained which is essentially free of metaphosphates and chloride ion; f. countercurrently contacting the combustion gas containing less than about 10 percent by weight hydrogen chloride obtained from step (d) with a flowing, aqueous slurry of phosphate rock particles, said slurry containing between about 10 percent and about 60 percent by weight of phosphate rock, about 80 percent of said phosphate rock particles being smaller than about 50 U.S. mesh; g. conducting step (f) at a temperature of between about 85 degrees C. and about 110 degrees C. at about atmospheric pressure, to produce a phosphoric acid-containing acidulate; h. withdrawing the phosphoric acid-containing acidulate obtained in step (g); i. extracting the acidulate withdrawn in step (h) with a phosphoric acid-miscible, calcium chloride brine-immiscible solvent selected from the group consisting of butanols and pentanols, to form a mutually immiscible calcium chloride-containing brine phase and a phosphoric acid-containing extract phase; j. separating the extract phase from the calcium chloride-containing brine phase; k. separating the phosphoric acid from said extract phase whereby a raffinate is formed, said raffinate being recycled as phosphoric acid-miscible, calcium chloride brine-immiscible solvent to step (i); and l. recycling the phosphoric acid obtained in step (k) to step (a) as phosphoric acid feed, thereby providing substantially all phosphoric acid required in the process.

Classifications:

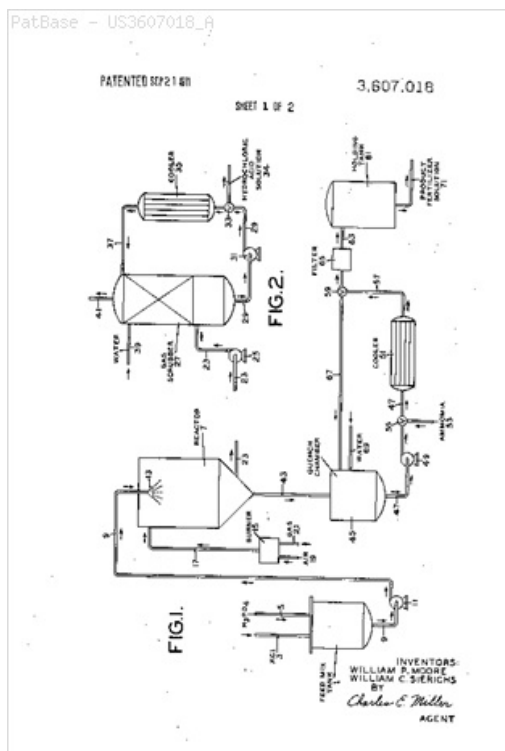
International (IPC 8-9): C01B25/41 C05B13/06 (Advanced/Invention); C01B25/00 C05B13/00 (Core/Invention)

International (IPC 1-7): C01B25/30 C01B25/38 C01B25/41 C01B7/08

CPC: C01B25/414 C05B13/06

European: C01B25/41B2 C05B13/06

US: 231/60 423/313 423/481



Family:

Publication number	Publication date	Application number	Application date
IL32510 A0	19690827	IL19690032510	19690630
IL32510 A1	19730130	IL19690032510	19690630
US3607018 A	19710921	US19680742096	19680702

Priority:

US19680742096 19680702

Probable Assignee: FERTILIZER IND INC

Assignee(s): (std): ALLIED CHEM

Assignee(s): ALLIED CHEM CORP ; ALLIED CHEMICAL CORP ; ARCADIAN A CORP OF DE CORP ; ARCADIAN CORP ; GENERAL ELECTRIC CREDIT CORP ; CHASE MANHATTAN BANK ; GENERAL ELECTRIC CAPITAL CORP ; FERTILIZER IND ; ARCADIAN ONE GATEHALL DR PARSIPPANY NJ 07054 A NY ; CHASE MANHATTAN BANK (NATIONAL ASSOCIATION) ; CHASE MANHATTAN BANK NATIONAL ASSOCIATION ; FERTILIZER IND INC ; GENERAL ELECTRIC CAPITAL A CORP OF NY CORP ; GENERAL ELECTRIC CREDIT A CORP OF NY CORP ; ITT INDUSTRIAL CREDIT CO

Inventor(s): (std): MOORE WILLIAM P ; SIERICH WILLIAM C

Inventor(s): WILLIAM C SIERICH ; WILLIAM P MOORE

Agent(s): REINHOLD COHN AND PARTNERS

85) Family number: 20538659 (GB818668A)

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Title: Improvements in and relating to phosphates and other fertilizers

Abstract: 818,668. Treating fertilizers with acid. DUNGEMITTEL-TECHNIK A.G. Feb. 12, 1958 [Feb. 16, 1957], No. 4639/58. Class 111. A method of treating fertilisers, phosphates and calcium cyanamide with mineral acids comprises introducing the finely ground fertilizer in continuous flow into a treatment chamber, blowing air into the chamber by means of nozzles

arranged at the bottom of the chamber to create a vortex whereby the finely ground particles are held in suspension and simultaneously spraying on to the fertilizer sulphuric acid and/or phosphoric acid and/or nitric acid. Ammonia may be sprayed on to the phosphate simultaneously with the acid. Granulation of the fertilizer particles may be produced by means of an agitator device rotating in the whirling mass. The fertilizers used may be natural phosphates, phosphates produced by chemical methods, Thomas slag, calcined phosphates, aluminium phosphate and may contain powdered organic substances such as ground peat, decantation sludges, saw-dust, ground lignin. In Fig. 1, nozzles 3 in the bottom of reaction chamber 1 blow vertical jets of air from lower chamber 4 supplied with air under pressure. Fertilizer fed in at 6 is momentarily held in suspension to receive jets from nozzle 11 on pipe 10. Reaction takes place and the treated product collects in layer 18 which is evacuated through orifices 14 and 15. Blown air carrying with it water vapour and gases generated by reaction passes out at 12 to dust extractor 13. Rotary agitator 19 produces an agglomeration of the treated products in the form of granules.

Classifications:

International (IPC 8-9): C05B1/10 (Advanced/Invention);

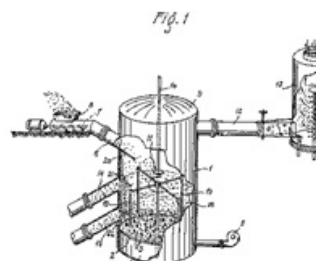
C05B1/00 (Core/Invention)

International (IPC 1-7): C05B19/02

CPC: C05B1/10

European: C05B1/10

PatBase - GB818668_A



Family:

Publication number	Publication date	Application number	Application date
GB818668 A	19590819	GB19580004639	19580212

Priority:

19570216

Probable Assignee: DUNGEMITTEL TECHNIK A G

Assignee(s): (std): DUNGEMITTEL TECHNIK A G

86) Family number: 5006668 (NL8001643A)

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Title: PHOSPHORIC ACID PRODN. BY COMBUSTION OF PHOSPHORUS - WITH SIMULTANEOUS PRODN. OF A PHOSPHATE-RICH BY-PRODUCT SUITABLE FOR FERTILISER OR FODDER USE

Abstract: In the prodn. of phosphoric acid, a comminuted raw material contg. minerals and at least 40 percent elementary phosphorus is combusted at 1500-1800 deg.C in the medium of an oxygen-contg. gas with a 10-50 percent excess of oxygen to give molten slag and gases contg. phosphoric anhydride, the molten slag is separated off at 1200-1400 deg.C, and the gases are hydrated to give phosphoric acid. The combustion is carried out in the presence of steam in an amt. of 1-40 percent, based on the mass of the raw material, with a molten slag specific surface area of 6-12 square metres per tonne raw material per hour. The slag sepd. off is cooled at a rate of 10000-10000 deg.C/second. A highly concd. phosphate material is produced suitable for use as a fertiliser or feedstuff simultaneously with the prodn. of highly pure phosphoric acid. The process minimises phosphorus losses, and eliminates the formation of pollutant by products.

Classifications:

International (IPC 8-9): A23K1/175 C01B25/20 C05B13/02 (Advanced/Invention);

A23K1/175 C01B25/00 C05B13/00 (Core/Invention)

International (IPC 1-7): C01B25/18 C01B25/20

CPC: A23K20/26 C01B25/20 C05B13/02

European: A23K1/175F C01B25/20 C05B13/02

Family:

Publication number	Publication date	Application number	Application date
NL177303 B	19850401	NL19800001643	19800320
NL177303 C	19850902	NL19800001643	19800320
NL8001643 A	19811016	NL19800001643	19800320

Priority:

NL19800001643 19800320

Probable Assignee: PROIZV OB TEKHENERGOKHIMPROM

Assignee(s): (std): PROIZV OB TEKHENERGOKHIMPROM

Assignee(s): PROIZVODSTVENNOE OBIEDINENIE TEKHENERGOKHIMPROM TE MOSKOU EN LENINGRADSKY GOSUDARSTVENNY NAUCHNO ISSLEDOVATELSKY I PROEKTNY INST OSNOVNOI KHIMICHESKOI PROMYSHLENNOSTI TE LENINGRAD USSR ; PROIZVODSTVENNOE OBIEDINENIE TEKHENERGOKHIMPROM TE MOSKOU EN LENINGRADSKY GOSUDARSTVENNY NAUCHNO ISSLEDOVATELSKY I PROEKTNY INSTITUT OSNOVNOI KHIMICHESKOI PROMYSHLENNOSTI TE LENINGRAD U S S R

Inventor(s): (std): ATABAEV MUKHAN DZHUMGALIEVICH ; BALJUK GRIGORY FEDOROVICH ; BOBIR NIKOLAI MAXIMOVICH ; DIAMANTIDI PANAET ALEXANDROVIC ; DORRENDORF KONSTANTIN KONSTANT ; GOKHGUT ASKOLD FRIDRIKHOVICH ; GOLOVLEV JURY IVANOVICH ; SERAZETDINOV DUGLAS ZIYAEVICH ; SILAKOV JURY MIKHAILOVICH ; SOSCHIN DAVID NAUMOVICH ; URIKH VOLDEMAR ALEXANDROVICH ; KRUGLYANSKY VLADIMIR YAKOVLEVI ; NONIN SEMEN FEDOROVICH ; NOVOSELTSEV VLADIMIR NIKOLAEVI ; PETELIN ALEFTIN IOSIFOVICH ; RUDIK ANATOLY ILICH ; YAKIMJUK VLADIMIR VLADIMIROVIC

Inventor(s): SEMEN FEDOROVICH NONIN ; PANAET ALEXANDROVICH DIAMANTIDI TE CHIMKENT ; MUKHAN DZHUMGALIEVICH ATABAEV ; NIKOLAI MAXIMOVICH BOBIR ; VLADIMIR NIKOLAEVICH NOVOSELTSEV ; VLADIMIR VLADIMIROVICH YAKIMJUK ; VLADIMIR YAKOVLEVICH KRUGLYANSKY ; VOLDEMAR ALEXANDROVICH URIKH ALLEN TE ALMA ATA ; GRIGORY FEDOROVICH BALJUK ; IVAN ; JURY IVANOVICH GOLOVLEV TE LVOV ; JURY MIKHAILOVICH SILAKOV ; KONSTANTIN KONSTANTINOVICH DORRENDORF ; DUGLAS ZIYAEVICH SERAZETDINOV ; ALEFTIN IOSIFOVICH PETELIN ALLEN TE MOSKOU ; ANATOLY ILICH RUDIK BEIDEN TE DZHAMBUL ; ASKOLD FRIDRIKHOVICH GOKHGUT ; DAVID NAUMOVICH SOSCHIN

87) Family number: 28316670 (US2002121117A)

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Title: STABILIZED ENHANCED EFFICIENCY CONTROLLABLE RELEASE CALCIUM CYANAMIDE COMPOSITIONS

Abstract: Calcium cyanamide compositions and methods for their use are disclosed. The compositions and methods stabilize active ionic compositions comprising calcium cyanamide and enhance the effectiveness of calcium cyanamide alone or synergistically in combination with nitrogen containing materials such as urea and organics, for example, manures. The compositions and methods also facilitate controllable site directed delivery of the contents of the stabilized compositions. The compositions and methods are effective for fertilizing, soil amending, metal stabilizing and odor and organism inhibition. The compositions are stable, easily calibrated, and non-clogging for spray delivery to target sites.

Classifications:

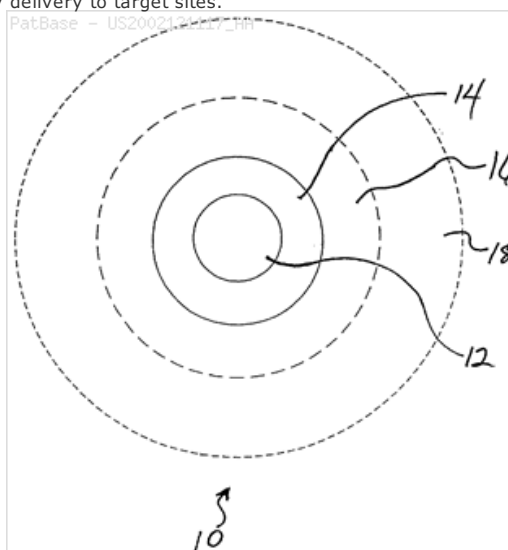
International (IPC 8-9): C05C7/00 C05C7/02 C05C9/00 C05F11/08 C05F3/00 C05G1/00 C05G3/00 C05G5/00 C09K17/14 (Advanced/Invention); C05G1/00 (Advanced/Non-invention)

International (IPC 1-7): C05C7/00 C05C7/02 C05C9/00 C05F11/08 C05G1/00 C05G3/00 C05G5/00

CPC: Y02P20/145 C05B7/00 C05G3/0064 C05C7/00 C05F3/00 C05G3/0041 Y02A40/205

European: C05B7/00 C05C7/00 C05C7/00+C9/00+C9/02+G3/00PN C05F3/00 C05F3/00+G3/00PN C05G3/00B10 C05G3/00B2K

US: 47/58.10R 47/58.10RS 47/58.1R 47/58.1SC 47/58.1SC 71/10 71/21 71/21S 71/28 71/55 71/55P 71/57 71/57S 71/64.02 71/64.03 71/64.07



Family:

Publication number	Publication date	Application number	Application date
AT396961 E	20080615	AT20000984130T	20001208
AU200120803 A1	20010618	AU20010020803	20001208
AU200120803 A5	20010618	AU20010020803	20001208
CN1407957 A	20030402	CN20008016824	20001208
CN1407957 B	20120509	CN20008016824	20001208
DE60039075 D1	20080710	DE20006039075	20001208
EP1254088 A1	20021106	EP20000984130	20001208
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JP2003519065 T2	20030617	JP20010543473T	20001208
NO20022538 A	20020808	NO20020002538	20020529
NO20022538 A0	20020529	NO20020002538	20020529
NO20022538 L	20020808	NO20020002538	20020529
US2002121117 AA	20020905	US20000733574	20001208
US2004016275 AA	20040129	US20030437606	20030513
US2008016765 AA	20080124	US20070880092	20070718
US6576035 BB	20030610	US20000733574	20001208
US7785388 BB	20100831	US20070880092	20070718
WO0142170 A1	20010614	WO2000US33446	20001208
WO0142170 C2	20020530	WO2000US33446	20001208
ZA200204554 A	20031007	ZA20020004554	20020606

Priority:

US19990169740P 19991208 US20000733574 20001208 WO2000US33446 20001208
US20030437606 20030513 US20070880092 20070718

Probable Assignee: HARTMANN RICHARD

Assignee(s): (std): HARTMAN RICHARD O W ; HARTMANN R O W ; HARTMANN RICHARD ; HARTMANN RICHARD O ; HARTMANN RICHARD O W ; HOLT TIMOTHY G ; RICHARD HARTMANN ; RICHARD O W HARTMANN ; SHIRLEY A RAY ; SHIRLEY A R JR ; SHIRLEY JR A RAY

Assignee(s): ROW HARTMANN ; R O W HARTMANN

Inventor(s): (std): HARTMANN RICHARD O ; HARTMANN RICHARD O W ; HOLT T ; HOLT TIMOTHY ; HOLT TIMOTHY G ; HARTMAN RICHARD O W ; HARTMANN R O W ; RAY SHIRLEY JR ; RICHARD OW HARTMAN ; SHIRLEY A

RAY ; SHIRLEY JR A RAY ; SHIRLEY R ; SHIRLEY RAY ; SHIRLEY RAY JR ; TIMOTHY HOLT ; SHIRLEY JR RAY ; SHIRLEY A R JR

Inventor(s): T HOLT ; SHIRLEY A RJR ; ROW HARTMANN ; SHIRLEY A ; RICHARD O W HARTMAN ; RICHARD O W HARTMANN ; HARTMANN RICHARD ; JR ; R O W HARTMANN ; R SHIRLEY

Agent(s): GOWSHALL JONATHAN VALLANCE; KLARQUIST SPARKMAN LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

88) Family number: 51145672 (US2013312472A)

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Title: UTILIZATION OF LIGNIN-RICH BIOMASS

Abstract: The invention relates to a method for utilizing biomass, in which the biomass is pyrolyzed during a heat treatment process to obtain driven-out gas and remaining carbon-rich solids. It is an object of the invention to specify a method for utilizing biomass, which is based on comparatively expensive feedstocks, but in return gives products of value with unusually good properties, the proceeds of which make the process economically viable. This object is achieved firstly by using a biomass having a lignin content of 10 to 30 percent by weight and a water content of 5 to 25 percent by weight, and by virtue of a heat treatment process comprising three residence times each on a respective level of temperature, wherein the first residence time lasts between 10 and 40 minutes, particularly of 30 minutes at a temperature level between 130 and 280 degrees centigrade, particularly of 250 degrees centigrade; the second residence time lasts between 5 and 30 minutes, particularly of 10 minutes at a temperature level between 300 and 500 degrees centigrade, particularly of 400 degrees centigrade; the third residence time lasts between 10 and 60 minutes, particularly of 20 minutes at a temperature level between 650 and 900 degrees centigrade, preferred between 700 and 900 degrees centigrade, particularly of 750 degrees centigrade

Classifications:

International (IPC 8-9): B01J20/20 C05F11/00 C09K17/02

C10B53/02 C10B57/02 (Advanced/Invention)

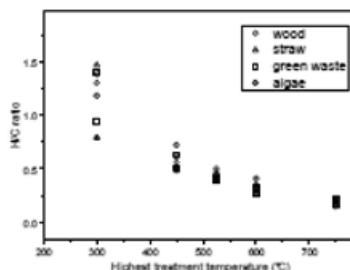
CPC: Y02E50/14 C09K17/02 C10B57/02 Y02C10/08 C05F11/00

B01J20/20 C10B53/02 Y02W30/47

European: C09K17/02 C10B53/02 C10B57/02

US: 47/48.5 502/419 502/420 71/24

PatBase - US2013312472_AA



Relation of the molar H/C ratio to the HTT of biochar

Family:

Publication number	Publication date	Application number	Application date
BR112013012995 A2	20160913	BR20131112995	20111122
CN103328612 A	20130925	CN201180065864	20111122
EP2457978 A1	20120530	EP20100192317	20101124
EP2643428 A1	20131002	EP20110787851	20111122
IN04813CN2013 A	20160610	IN2013CN04813	20130620
US2013312472 AA	20131128	US20110989315	20111122
WO12069448 A1	20120531	WO2011EP70634	20111122

Priority:

EP20100192317 20101124 EP20110787851 20111122 WO2011EP70634 20111122

Probable Assignee: EVONIK DEGUSSA GMBH

Assignee(s): (std): BREHMER BENJAMIN ; BUSSE JENS ; EVONIK DEGUSSA GMBH

Inventor(s): (std): BREHMER BENJAMIN ; BUSSE JENS

Inventor(s): JENS BUSSE ; BENJAMIN BREHMER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

89) Family number: 42415672 (EP1985590A1)

© PatBase

Title: SAWDUST BASED MIXTURE COMPRISING IRON-CONTAINING WATERWORKS SLUDGE FROM DRINKING WATER TREATMENT PLANTS

Abstract: The method of treatment of iron-containing sludge, mainly from water-treatment plants, consists in the mixing of dewatered and dry sludge with sawdust enriched with an oxidiser, e.g. KNO₃, at a ratio that will guarantee the total carbon content in the mixture of 40 percent at least. The formed mixture will be used for the production of pelleted or briquetted fuel while other possible pelleting additives are used. After the burning of the fuel in heating installations of lower capacities ash is mixed with HCl and by filtration of the liquid fraction recycled FeCl₃ is obtained that will be reused as a clarifying salt in water-treatment plants.

Classifications:

International (IPC 8-9): C02F11/06 C02F11/12 C02F11/14 C10L5/44 C10L5/46 C22B3/10 (Advanced/Invention);

C02F11/06 C02F11/12 C02F11/14 C10L5/40 C22B3/00 (Core/Invention)

CPC: Y02W10/40 C22B1/2406 C02F1/5236 C02F11/00 C02F11/06 C02F11/14 C10L5/363 C10L5/46 C22B1/244 C22B3/10

C22B7/007 C22B7/02 Y02E50/10 Y02E50/30 Y02P10/216 Y02P10/234 Y02P10/238

European: C02F11/06 C02F11/14 C10L5/36D C10L5/46 C22B1/244 C22B1/24B C22B3/10 C22B7/00D1 C22B7/02 M02F1/52F M02F11/00 Y02E50/10 Y02E50/30

Family:

Publication number	Publication date	Application number	Application date
AT455079 E	20100115	AT20080008013T	20080425
CZ20070312 A3	20090211	CZ20070000312	20070427
CZ300446 B6	20090520	CZ20070000312	20070427
DE602008000527 D1	20100304	DE200860000527T	20080425
EP1985590 A1	20081029	EP20080008013	20080425
EP1985590 B1	20100113	EP20080008013	20080425

Priority:

CZ20070000312 20070427

Probable Assignee: JIHOESKA UNIVERZITA V CESKYCH

Assignee(s): (std): JIHOESKA UNI V CESKYCH BUDEJO ; JIHOESKA UNIVERZITA V CESKYCH

Assignee(s): JIHOESKA UNIVERZITA V CESKYCH BUDEJOVICICH ZEMEDELSKA FAKULTA ; Jihocesuniverzita v Ceskh Budejovich ; JIHOESKA UNIVERSITA V CESKYCH BUDEJOVICICH

Inventor(s): (std): BROUCEK JOSEF ; KLIMSE FRANTISEK ; PETERKA JIRI ; KOLAR LADISLAV PROF ING DRSC ; KLIMES FRANTISEK DOC ING CSC ; KUZEL STANISLAV PROF ING CSC ; KLIMES FRANTISEK DOC ING ; KUZEL STANISLAV PROF ING ; KOLAR LADISLAV PROF ING ; KLIMES FRANTISEK ; BROUCEK JOSEF ING ; KUZEL STANISLAV ; KOLAR LADISLAV ; PETERKA JIRI ING

Inventor(s): KUZEL STANISLAV PROFING CSC ; KLIMES FRANTISEK DOCING CSC ; KLIMES FRANTISEK DOCING ; KUZEL STANISLAV PROFING

Agent(s): SEDLAK JIRI

Designated states: AL AT BA 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 TR

90) Family number: 65976691 (WO17093570A1)

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Title: PROCESS FOR MAKING GRANULES AND AGGLOMERATES FROM POWDERS

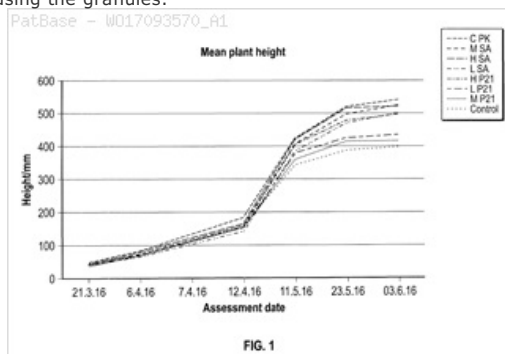
Abstract: A method of processing a powder, comprising (a) contacting the powder with (i) a 2-40 percent by weight solution of a sulphur- or phosphorous-containing mineral acid or a mixture thereof, or (ii) one or more alkaline earth metal oxides, carbonates or hydroxides, or a mixture thereof; (b) combining the product of (a)(i) with one or more alkaline earth metal oxides, carbonates or hydroxides, or a mixture thereof; or combining the product of (a)(ii) with a 2-40 percent by weight solution of a sulphur- or phosphorous-containing mineral acid or a mixture thereof and optionally with further of the alkaline earth metal oxides, carbonates or hydroxides, or a mixture thereof; and (c) granulating the combination of (b) to form granules. Phosphate- and potassium-containing fertilisers are made using the granules.

Classifications:

International (IPC 8-9): C05B11/08 C05B11/10

C05B17/00 (Advanced/Invention)

CPC: C05B11/08 C05B11/10 C05B17/00



Family:

Publication number	Publication date	Application number	Application date
EP3383828 A1	20181010	EP20160810282	20161205
WO17093570 A1	20170608	WO2016EP79789	20161205

Priority:

EP20150197858 20151203 WO2016EP79789 20161205

Probable Assignee: POWER MINERALS LTD

Assignee(s): (std): POWER MINERALS LTD

Inventor(s): (std): GAY MICHAEL ROBERT ; DRURY LESLIE JAMES

Agent(s): SCHLICH GEORGE; SCHLICH GEORGE WILLIAM

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

91) Family number: 14612719 (WO0210068A1)

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Title: PRODUCTION OF METAL OXIDES

Abstract: There is described a proces for the purification of metal oxides which comprises the steps of: (i) roasting a mineral ore in the presence of an alkali; (ii) extracting the desired metal salt produced in step (i); (iii) precipitation of a hydroxide salt; and (iv) converting the hydroxide salt into an appropriate oxide. The process applies to the recovery of alumina, titania and ferric oxide from bauxite and/or red mud.

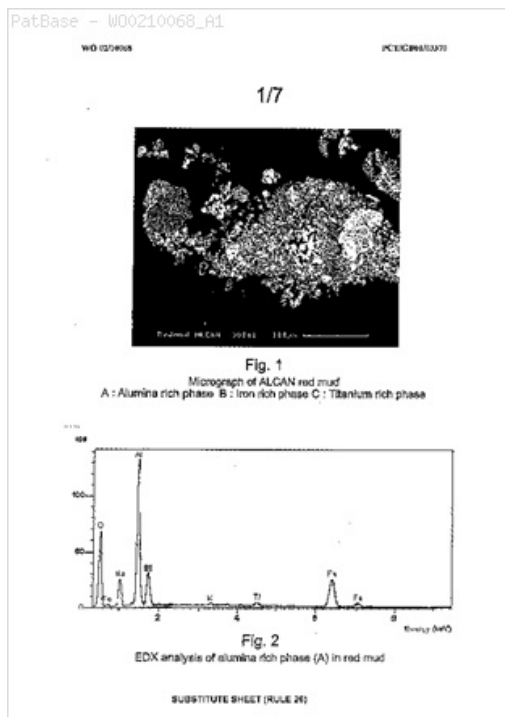
Classifications:

International (IPC 8-9): C01F7/06 C01F7/08 C01G1/02 C01G23/047 C01G49/06 C22B1/02 C22B34/12 (Advanced/Invention); C01F7/00 C01G1/02 C01G23/00 C01G49/02 C22B1/00 C22B34/00 (Core/Invention)

International (IPC 1-7): C01F7/08 C01G23/047 C01G49/06

CPC: C01F7/066 C01F7/08 C01G1/02 C01G23/047 C01G49/06 C01P2002/72 C01P2002/85 C01P2004/03 C01P2004/51 C22B1/02 C22B34/1209

European: C01F7/06H C01F7/08 C01G1/02 C01G23/047 C01G49/06 C22B1/02 C22B34/12B2 M01P2/72 M01P2/85 M01P4/03 M01P4/51

**Family:**

Publication number	Publication date	Application number	Application date
AU2001276466 AA	20020213	AU20010276466	20010730
AU200176466 A1	20020213	AU20010076466	20010730
AU200176466 A5	20020213	AU20010076466	20010730
GB200018592 A0	20000913	GB20000018592	20000729
WO2010068 A1	20020207	WO2001GB03370	20010730

Priority:

GB20000018592 20000729 WO2001GB03370 20010730

Probable Assignee: UNIV LEEDS

Assignee(s): (std): THATHAVADKAR VILAS D ; UNIV LEEDS ; ANTONY MALPAN PAILO ; JHA ANIMESH

Assignee(s): OF LEEDS UNIV ; UNIVERSITY OF LEEDS THE ; UNIVERSITY OF LEEDS

Inventor(s): (std): THATHAVADKAR VILAS D ; JHA ANIMESH ; ANTONY MALPAN PAILO

Inventor(s): ANIMESH JHA ; MALPAN PAILO ANTONY ; VILAS D THATHAVADKAR

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

92) Family number: 67467728 (IN201631007470A)

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Title: AN IMPROVED PROCESS FOR MICROBIAL DEPHOSPHORISATION OF LD SLAG

Abstract: The present invention relates to an improved process for microbial dephosphorisation of LD slag for utilisation in steel making. This invention particularly relates to the optimization of process parameters and use of novel microbial isolates. The microbial isolates screened from LD slag dump site were found to be able to degrade calcium silicate and calcium phosphate matrix. These isolates on sequential adaptation to various concentrations of calcium phosphate improved their efficiency of phosphorus removal. The novelty of the present invention is the single step approach with a new isolate of Burkholderia species, with high resistance to calcium silicate/phosphate to selectively degrade and solubilise phosphorus in solution. The dissolution of phosphorus from LD Slag in aqueous medium occurs at room temperature, atmospheric pressure without media resulting nearly 99 percent phosphorus removal in 5 days. The process is of low cost and the large scale can be used industrially. The process meets the strict environmental regulations of making LD slag suitable for steel making applications.

Classifications:

International (IPC 8-9): C02F3/00 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
IN201631007470 A	20171110	IN201631007470	20160303

Priority:

IN201631007470 20160303

Probable Assignee: TATA STEEL LTD

Assignee(s): COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH ; TATA STEEL LTD

Inventor(s): ABHILASH ; ANIRBAN GHOSH ; SUPRIYA SARKAR ; PRATIMA MESHAM ; OMKAR AVINASH SHINDE

93) Family number: 60168730 (US2015239788A)

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Title: FERTILIZER COMPOSITIONS COMPRISING A CELLULOSE NUTRIENT COMPONENT AND METHODS FOR USING SAME

Abstract: Aspects of the invention include compositions for fertilizing and remediating soil. Compositions according to certain embodiments include a cellulose nutrient composition, a microbial blend composition, a source of nitrogen, a source of phosphorus and exotic micronutrients. Methods for using compositions of the invention to fertilize and remediate soil and kits having one or more compositions for fertilizing and remediating soil are also described.

Classifications:

International (IPC 8-9): A01N63/00 A01N63/04 C05B17/00 C05B19/00 C05D9/02 C05F11/00 C05F11/08 C05G1/00 C05G3/02 (Advanced/Invention)

CPC: C05B17/00 C05G3/02 A01N63/00 A01N63/04 C05F11/08 C05B19/00 C05F11/00 C05D9/02

US: 1/1 504/101 71/6

Family:

Publication number	Publication date	Application number	Application date
AU2015219518 AA	20160324	AU20150219518	20150123
AU2015219518 BB	20170525	AU20150219518	20150123
AU2017210504 AA	20170817	AU20170210504	20170801
EP3110776 A1	20170104	EP20150751569	20150123
EP3110776 A4	20171122	EP20150751569	20150123
NZ717718 A	20170630	NZ20150717718	20150123
US2015239788 AA	20150827	US20150603929	20150123
US2016244376 AA	20160825	US20160052620	20160224
US2017297961 AA	20171019	US20170610099	20170531
US2018170817 AA	20180621	US20170842317	20171214
US9302948 BB	20160405	US20150603929	20150123
US9695091 BB	20170704	US20160052620	20160224
US9884791 BB	20180206	US20170610099	20170531
US10189750 BB	20190129	US20170842317	20171214
WO15126571 A1	20150827	WO2015US12643	20150123

Priority:

US20140943947P 20140224 AU20150219518 20150123 US20150603929 20150123
WO2015US12643 20150123 US20160052620 20160224 US20170610099 20170531
AU20170210504 20170801 US20170842317 20171214

Probable Assignee: YAMASHITA THOMAS

Assignee(s): (std): YAMASHITA THOMAS ; YAMASHITA THOMAS T

Inventor(s): (std): YAMASHITA THOMAS T

Agent(s): FB RICE; FB RICE PTY LTD; DUXBURY STEPHEN; BOZICEVIC FIELD AND FRANCIS LLP; BRET E; FIELD BRET E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

94) Family number: 755730 (LU43096A)

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Abstract: Source: LU43096A [DE] [Source: Claim 1] 1. verfahren sur Gewinnung von als Duengemittel..assign; Schlacke aus Seml-Thomae-Rohelaen durch Srleohan mit tels Sauerstoff nach dem Zwei=Schlackenverfahren9 da durch gekennzeichnet 9 dass In der ersten Prischperlod» nur Zweitsohlaoke In einer Menge von weniger als 90 pro Tonne eingesetztem Roheisen verwendetss diese Sohle nach der ersten Frisehperloede als Duengesohlaoke abger und dem Roheisen In der folgenden Frlbetachperloede zum 1 - tgfrlsehen die erforderliche Kalkmenge zugesetzt wli 2»Verfahren nach Anspruch 1, dadurch gekennzeichnet« dass der ueberschuss der In der zweiten Prischparloede ge womenen ei s enoxy dreschen Sweitschlack(C) abgezogen un gegebenenfalls als Einsatz Im Hochofen verwendet wird» 3» Verfahren nach Anspruch 1 oder 2, dadurch gekeaa» zeichnetp dass In dar ersten PrisehpericS(R) vorzugswei- Sohrott und la der zweiten Fueaohpsrlodd vorzugsweise Erz als Kuehlmittel verwendet wird«?

Machine translation: [Source: claim 1] procedure 1 sur extraction of as fertilizer... assign; ««Slag from Macbeth Thomae Rohelaen by Srleohan with oxygen after the Zwei = Schlackenverfahren9 through 9 marked that In of the first Prischperlod» only Zweitsohlaoke used In of a lot of less than 90 per ton inserted cast iron ss this sole after the first Frisehperloede as a Duengesohlaoke abger and cast iron In the following Frlbetachperloede 1 - tgfrlsehen the amount of lime zugesetzt wli 2» process according to claim 1 ««, this marked «that the surplus which in the second Prischparloede on womenen egg enoxy thresh s Sweitschlack(C) deducted un demand is used as a use In the blast furnace» 3» process according to claim 1 or 2, this gekeaa» zeichnetp that In dar first PrisehpericS(R) vorzugswei-Sohrott and la of the second Fueaohpsrlodd preferably ore is used as a coolant «? ».

Classifications:

International (IPC 8-9): C21C5/36 (Advanced/Invention); C21C5/28 (Core/Invention)

CPC: C21C5/36

European: C21C5/36

Family:

Publication number	Publication date	Application number	Application date
LU43096 A	19630329		19630129

Priority:

DE1962B065727 19620131

95) Family number: 57409740 (US2014259906A)

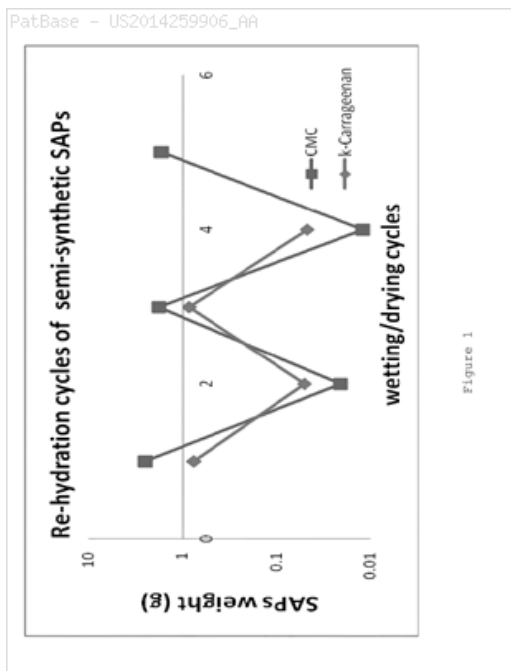
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Title: MICROENVIRONMENT FOR EFFICIENT UPTAKE OF FERTILIZERS AND OTHER AGROCHEMICALS IN SOIL

Abstract: The present invention provides a bead comprising: i) an external zone comprising a super absorbent polymer (SAP) that is capable of absorbing at least about 5 times its weight in water, surrounding ii) at least one internal zone comprising a core that contains at least one agrochemical, wherein the external zone is permeable to oxygen when hydrated, or the internal zone is formulated to release the at least one agrochemical into the external zone over a period of at least about one week when the hydrogel of the external zone is hydrated. The present invention also provides methods of using beads of the invention.

Classifications:

International (ipc 8-9): A01G A01G1/00 A01G24/00 A01G24/40 A01G29/00 A01G7/00 A01G7/06 A01G9/00 A01N A01N25/04 A01N25/26 C05G C05G3/00 C05G3/04 C05G3/06 C05G5/00 (Advanced/Invention); A01G1/00 (Core/Invention); A01G A01N C05G (Subclass/Invention)
CPC: A01N25/26 C05G3/0029 C05G3/04 A01G22/00 A01N25/04
US: 424/405 47/48.5 47/58.1R 504/361 71/27



Family:

Publication number	Publication date	Application number	Application date
AR095635 AA	20151028	AR2014P101262	20140317
AU2014229490 AA	20151105	AU20140229490	20140314
AU2018200770 AA	20180222	AU20180200770	20180201
BR112015023763 A2	20170718	BR20151123763	20140314
CA2907029 AA	20150915	CA20142907029	20140314
CL2015002760 A1	20160205	CL20150002760	20150915
CN105338803 A	20160217	CN201480016404	20140314
CO7540385 A2	20160310	CO20150243484	20151014
CR20150550 A	20160603	CR20150000550	20151014
CU20150127 A7	20160629	CU20150000127	20150915
EA201591759 A1	20160331	EA20150091759	20140314
EP2966974 A2	20160120	EP20140763530	20140314
EP2966974 A4	20170118	EP20140763530	20140314
HK1220322 A1	20170505	HK20160108562	20160719
ID201700789 A	20170210	ID2015P0006576	20140314
IL241656 A0	20151231	IL20140241656	20140314
IN09384DN2015 A	20160219	IN2015DN09384	20151009
JP2016509862 T2	20160404	JP20150562405T	20140314
JP6435279 B2	20181205	JP20150562405T	20140314
KR20150144752 A	20151228	KR20157029827	20140314
MX2015012769 A1	20160531	MX20150012769	20140314
PE00812016 A1	20160214	PE20150001985	20140314
PH2015502009 A	20160111	PH20150502009	20150908
TH162345 A	20170504	TH20151005490	20140314
US2014259906 AA	20140918	US20140214141	20140314
US2016037728 AA	20160211	US20140777118	20140314
US9730393 BB	20170815	US20140214141	20140314
UY35482 A1	20141031	UY20140035482	20140317
WO14140918 A2	20140918	WO2014IB01194	20140314
WO14140918 A3	20150219	WO2014IB01194	20140314

Priority:

US20130793697P 20130315 AU20140229490 20140314 US20140214141 20140314
WO2014IB01194 20140314 US20140777118 20140314 AU20180200770 20180201

Probable Assignee: ADAMA MAKHTESHIM LTD

Assignee(s): (std): ADAMA MAKHTESHIM ; ADAMA MAKHTESHIM LTD ; BEN MOSHE MATTI ; SHANI URI ; SEGAL ERAN ; VITNER ASHER ; MAKHTESHIM CHEM WORKS LTD ; MILLER ZVI

Assignee(s): ERAN SEGAL ; N A ; MAKHTESHIM CHEMICAL WORKS LTD ; ASHER VITNER

Inventor(s): (std): BEN MOSHE MATTI ; SHANI URI ; SEGAL ERAN ; VITNER ASHER ; ASHER VITNER ; ERAN SEGAL ; URI SHANI ; MATTI BEN MOSHE ; MATI BEN MOSHE ; MILLER ZVI

Agent(s): FB RICE ; FB RICE PTY LTD ; AITKEN KLEE LLP ; ESTUDIO CAREY LTDA ; JUAN CARLOS CUESTA QUINTERO ; CARPINTERO LOPEZ FRANCISCO ; DEACONS ; IR MIGNI MYRIASANDRA SH MIP MSEL ; S AND S INT PPC ; GARY J ; COOPER AND DUNHAM LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: REACTION OF PHOSPHORIC ACID, UREA, AND AMMONIA

Abstract: A process for obtaining, in the same manufacturing process, two different fertilizers, namely a solid or liquid fertilizer which is based on ammonium and urea polyphosphate and the solutions of which are clear and stable over a period of time, and a solid binary fertilizer (N,P) or solid ternary fertilizer (N, P, K) which is very concentrated and based on ammonium-urea phosphate.

Classifications:

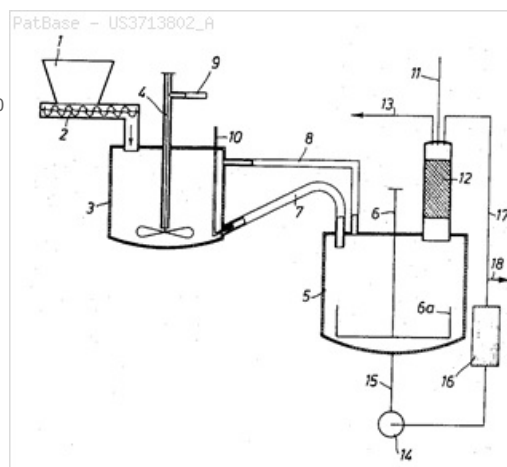
International (IPC 8-9): C01B25/40 C05B7/00 (Advanced/Invention); C05B7/00 (Core/Invention)

International (IPC 1-7): B01J1/00 C01B25/00 C01B25/28 C01B25/38 C01B25/40 C05B1/06 C05B13/06 C05B15/00 C05B19/00 C05B7/00 C05C9/00 C05G1/00

CPC: C05B7/00

European: C05B7/00

US: 423/302 71/2.9 71/29 71/35



Family:

Publication number	Publication date	Application number	Application date
BE760491 A	19710527	BE19700760491	19701217
BR7102508 A0	19730116	BR19710002508	19710428
DE2100413 A1	19710715	DE19712100413	19710107
DE2100413 B2	19741017	DE19712100413	19710107
DE2100413 C3	19770526	DE19712100413	19710107
FR2076321 A5	19711015	FR1970000806	19700109
FR2097452 A6	19720303	FR19700025133	19700707
GB1313431 A	19730411	GB19700061997	19701231
IL36262 A0	19710428	IL19710036262	19710222
IL36262 A1	19740314	IL19710036262	19710222
JP50016319 B4	19750612	JP19700119192	19701226
NL154481 B	19770915	NL19710000247	19710108
NL7100247 A	19710713	NL19710000247	19710108
US3713802 A	19730130	US19700101962	19701228

Priority:

FR1970000806 19700109 FR19700025133 19700707

Probable Assignee: UGINE KUHLMANN

Assignee(s): (std): UGINE KUHLMANN ; UGINE KUHLMANN

Assignee(s): UGINE KUHLMANN SOCIETE ANONYME PARIJS ; UGINE KUHLMANN 10 RUE DU GENERAL FOY PARIS FRANCE ; FA UGINE KUHLMANN PARIS ; KUHLMANN U ; SA UGINE KUHLMANN FR

Inventor(s): (std): GITTENAIT M ; GITTENAIT MARCEL

Inventor(s): GITTENAIT MARCEL COLOMBES FRANKREICH ; GITTENAIT M FR

Agent(s): REINHOLD COHN AND PARTNERS

Title: Process for the Recovery of Rare Earth Elements

Abstract: A process for recovering rare earth elements from a composite ore or concentrate that includes at least apatite group minerals, as well as at least one other rare earth containing mineral, the process including: a. subjecting the ore or concentrate to a sulphuric acid pre-leach to form a pre-leach liquid phase and a pre-leach solid phase, the pre-leach liquid phase containing dissolved phosphates and dissolved rare earth elements, and the pre-leach solid phase containing sulphuric acid-insoluble minerals and calcium sulphate precipitate; b. mixing the pre-leach solid phase with sulphuric acid and baking the mixture at a temperature in the range of 200 to 3000C to produce an acid-baked solid phase; and c. subjecting the acid-baked solid phase to a water-leach, in water and/or in the pre-leach liquid phase, to dissolve rare earth elements in the acid-baked solid phase to form a water-leach liquid phase and a water-leach solid phase; wherein the water-leach liquid phase is at least partly recycled to the pre-leach and rare earth elements are recovered from the pre-leach liquid phase; and/or the water-leach liquid phase is not recycled to the pre-leach and rare earth elements are recovered from the water-leach liquid phase. I - on; > L Ufr. ~ LL ss1 I: I V1,~

Classifications:

International (IPC 8-9): C22B3/08 C22B3/44 C22B59/00 (Advanced/Invention)

CPC: Y02P10/234

Publication number	Publication date	Application number	Application date
AU2014250661 AA	20151015	AU20140250661	20141016

Agent(s): PHILLIPS ORMONDE FITZPATRICK

European: F26B3/20B F26B5/16 R26B210/16

Publication number	Publication date	Application number	Application date
■ HU0900567 A0	20091028	HU20090000567	20090910
■ HU0900567 AB	20110530	HU20090000567	20090910
■ HU229983 B1	20150330	HU20090000567	20090910
■ WO10112947 A1	20101007	WO2010HU00032	20100324

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TN TR TT TZ UA UG US UZ VN VC VZ ZA ZM ZW

Title: A process for the preparation of fertilisers containing citrate-soluble phosphate

Abstract: Products useful as fertilizers and comprising double salts of the type CaKPO_4 are obtained by calcining mineral phosphates with trialkaliorthophosphates at moderate temperatures which may be below 1100 DEG C. For each part of P_2O_5 in the mineral phosphate a quantity of trialkali-phosphate containing more than 0,5, preferably about 0,8 parts of P_2O_5 must be employed. In place of trialkali phosphate, mixtures of alkali metaphosphate or pyrophosphate or mono- or di-alkali phosphate with alkali carbonate or alkali silicate may be used. Salts such as potassium chloride or magnesium chloride which assist the reaction may be added to the initial mixture and enable the reaction temperature to be lowered to 900 or 800 DEG C. By subjecting the mineral phosphate to a pretreatment with P_2O_5 , for instance by using the waste gases from a phosphorus furnace, less trialkali phosphate may be used; the said pretreatment may increase the P_2O_5 content of the mineral by as much as 20 per cent. Reaction may be effected in a rotary or shaft furnace or in a Dwight-Lloyd blast apparatus, and the initial mixture may be moulded if desired.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);
C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB475993 A	19371130	GB19360035366	19361224

Priority:

GB19360035366 19361224

Probable Assignee: FRIEDRICH KERSCHBAUM

Assignee(s): (std): FRIEDRICH KERSCHBAUM

100) Family number: 53030781 (WO13022332A1)

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Title: MIXTURE CONTAINING MICROORGANISMS FOR BIOREMEDIATION AND BIOAUGMENTATION, PRODUCTION METHOD AND USE OF SAME

Abstract: The invention relates to a method for producing a mixture for bioremediation, containing nixtamalized maize flour and a composition based on bacteria of the Bacillus genus. This mixture is used for bioremediation and bioaugmentation involving degradation, for the decontamination of compounds, as well as eliminating bad odours and faecal coliforms and reducing the concentration of lipids, starch and proteins present in contaminated water or solid surfaces exposed to the air and affected by moisture, as well as for the degradation of cellulose in soils and fertiliser additive.

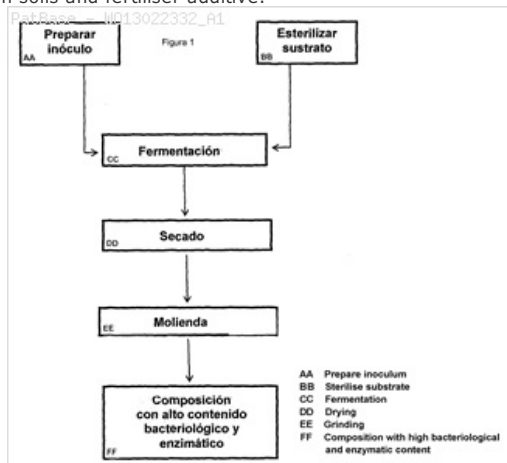
Classifications:

International (IPC 8-9): C02F3/30 C02F3/34 C12N1/20

C12N11/02 (Advanced/Invention);

C02F1/00 C02F3/00 (Core/Invention)

CPC: C12N1/20 C12N11/02 C02F3/34 C02F3/342 C02F3/348
C02F2303/02



Family:

Publication number	Publication date	Application number	Application date
MX2011008329 A1	20130221	MX20110008329	20110805
MX351319 B	20170925	MX20110008329	20110805
WO13022332 A1	20130214	WO2012MX00076	20120830

Priority:

MX20110008329 20110805

Probable Assignee: UNIV AUTONOMA METROPOLITANA

Assignee(s): (std): ADAME RODRIGUEZ JUAN MANUEL ; AGUIRRE GAMBOA RAUL ALEJANDRO ; ARECHIGA CARVAJAL ELVA TERESA ; FAVELA TORRES ERNESTO ; VINIEGRA GONZALEZ GUSTAVO ; UNIV AUTONOMA METROPOLITANA ; UNIV AUTONOMA DE NUEVO LEON

Assignee(s): UNIVERSIDAD AUTONOMA METROPOLITANA ; UNIVERSIDAD AUTONOMA DE NUEVO LEON

Inventor(s): (std): VINIEGRA GONZALEZ GUSTAVO ; FAVELA TORRES ERNESTO ; ARECHIGA CARVAJAL ELVA TERESA ; AGUIRRE GAMBOA RAUL ALEJANDRO ; ADAME RODRIGUEZ JUAN MANUEL ; TORRES ERNESTO FAVELA ; RODRIGUEZ JUAN MANUEL ADAME ; RAUL ALEJANDRO AGUIRRE GAMBOA ; JUAN MANUEL ADAME RODRIGUEZ ; GUSTAVO VINIEGRA GONZALEZ ; GONZALEZ GUSTAVO VINIEGRA ; GAMBOA RAUL ALEJANDRO AGUIRRE ; ERNESTO FAVELA TORRES ; ELVA TERESA ARECHIGA CARVAJAL ; CARVAJAL ELVA TERESA ARECHIGA

Agent(s): GARZA VITE JUAN ANGEL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PHOSPHORIC ACID PRODN. BY COMBUSTION OF PHOSPHORUS - WITH SIMULTANEOUS PRODN. OF A PHOSPHATE-RICH BY=PRODUCT SUITABLE FOR FERTILISER OR FODDER USE

Abstract: In the prodn. of phosphoric acid, a comminuted raw material contg. minerals and at least 40 percent elementary phosphorus is combusted at 1500-1800 deg.C in the medium of an oxygen-contg. gas with a 10-50 percent excess of oxygen to give molten slag and gases contg. phosphoric anhydride, the molten slag is separated off at 1200-1400 deg.C, and the gases are hydrated to give phosphoric acid. The combustion is carried out in the presence of steam in an amt. of 1-40 percent, based on the mass of the raw material, with a molten slag specific surface area of 6-12 square metres per tonne raw material per hour. The slag sepd. off is cooled at a rate of 10000-10000 deg.C/second. A highly concd. phosphate material is produced suitable for use as a fertiliser or feedstuff simultaneously with the prodn. of highly pure phosphoric acid. The process minimises phosphorus losses, and eliminates the formation of pollutant by products.

Classifications:

International (IPC 8-9): A23K1/175 A23K20/26 C01B25/20 C05B5/00 (Advanced/Invention);

A23K1/175 C01B25/00 C05B5/00 (Core/Invention)

International (IPC 1-7): C01B25/18 C01B25/20

CPC: C05B5/00 A23K20/26 C01B25/20

European: A23K1/175F C01B25/20 C05B5/00

Family:

Publication number	Publication date	Application number	Application date
DE3009732 A1	19810924	DE19803009732	19800313
DE3009732 C2	19831020	DE19803009732	19800313

Priority:

DE19803009732 19800313

Probable Assignee: LE GNI I PI OSNOVNOJ KHIM PROM

Assignee(s): (std): LE G NAUCNO I SKIJ I PI OSNOVN ; LE GNI I PI OSNOVNOJ KHIM PROM ; PROIZV OB EDINENIE TECHENERGOC ; PROIZV OB TECHENERGOCHIMPROM

Assignee(s): PROIZVODSTVENNOE OB EDINENIE TECHENERGOCHIMPROM ; PROIZVODSTVENNOE OB gt gt EDINENIE TECHENERGOCHIMPROM ; PROIZVODSTVENNOE OB EDINENIE TECHENERGOCHIMPROM MOSKVA SU ; LENINGRADSKIY GOSUDARSTVENNYJ NAUCNO ISSLEDOVATEL SKIJ I PROEKTNYJ INSTITUT OSNOVNOJ CHIMICESKOJ PROMYSLENNOSTI LENINGRAD SU ; LENINGRADSKIY GOSUDARSTVENNYJ NAUCNO ISSLEDOVATEL ; LENINGRADSKIY GOSUDARSTVENNYJ NAUCNO ISSLEDOVATEL SKIJ I PROEKTNYJ INST OSNOVNOJ CHIMICESKOJ PROMYSLENNOSTI ; LENINGRADSKIY GOSUDARSTVENNYJ NAUCNO ISSLEDOVATEL SKIJ I PROEKTNYJ INST OSNOVNOJ CHIMICESKOJ PROMYSLENNOSTI ; LENINGRADSKIY GOSUDARSTVENNYJ NAUCNO ISSLEDOVATEL SKIJ I PROEKTNYJ INSTITUT OSNOVNOJ CHIMICESKOJ PROMYSLENNOSTI

Inventor(s): (std): ATABAEV MUCHAN DSUMGALIEVIC ; BALJUK GRIGORIY FEDOROVIC ; BOBIR NIKOLAI MAKSIMOVIC ; DIAMANTIDI PANAET ALEKSANDROVI ; DORRENDORF KONSTANTIN KONSTANT ; GOCHGUT ASKOLD FRIDRICHOVIC ; GOLOVLEV JURIJ IVANOVIC ; KRUGLYANSKIY VLADIMIR YAKOVLEV ; NONIN SEMEN FEDOROVIC ; NOVOSELTSEV VLADIMIR NIKOLAEVI ; PETELIN ALEFTIN IOSIFOVIC ; RUDIK ANATOLY ILIC ; SERAZETDINOV DUGLAS ZIYAEVIC ; SILAKOV JURIJ MICHAILOVIC ; SOSIN DAVID NAUMOVIC ; ULRICH VOLDEMAR ALEKSANDROVIC ; YAKIMJUK VLADIMIR VLADIMIROVIC ; SISKIN IVAN ALEKSEEVIC

Inventor(s): SISKIN IVAN ALEKSEEVIC VIDNOE MOSKOVSKAJA OBLAST ; SISKIN IVAN ALEKSEEVIC VIDNOE MOSKOVSKAJA OBLAST SU ; YAKIMJUK VLADIMIR VLADIMIROVIC MOSKVA SU ; YAKOVLEVIC KRUGLYANSKIY VLADIMIR ; ZIYAEVIC SERAZETDINOV DUGLAS ; ULRICH VOLDEMAR ALEKSANDROVIC ALMA ATA SU ; VLADIMIROVIC YAKIMJUK VLADIMIR ; SILAKOV JURIJ MICHAILOVIC MOSKVA SU ; RUDIK ANATOLY ILIC DSAMBUL SU ; PETELIN ALEFTIN IOSIFOVIC LENINGRAD SU ; NOVOSELTSEV VLADIMIR NIKOLAEVIC MOSKVA SU ; KRUGLYANSKIY VLADIMIR YAKOVLEVIC ; MAKSIMOVIC BOBIR NIKOLAI ; MICHAILOVIC SILAKOV JURIJ ; NAUMOVIC SOSIN DAVID ; NIKOLAEVIC NOVOSELTSEV VLADIMIR ; GOLOVLEV JURIJ IVANOVIC LVOV SU ; ILIC RUDIK ANATOLY ; IOSIFOVIC PETELIN ALEFTIN ; IVANOVIC GOLOVLEV JURIJ ; KONSTANTINOVIC DORRENDORF KONSTANTIN ; DORRENDORF KONSTANTIN KONSTANTINOVIC MOSKVA SU ; DSUMGALIEVIC ATABAEV MUCHAN ; FEDOROVIC BALJUK GRIGORIY ; FEDOROVIC NONIN SEMEN ; FRIDRICHOVIC GOCHGUT ASKOLD ; DIAMANTIDI PANAET ALEKSANDROVIC CHIMKENT SU ; ALEKSANDROVIC DIAMANTIDI PANAET ; ALEKSANDROVIC ULRICH VOLDEMAR ; ALEKSEEVIC SISKIN IVAN ; BOBIR NIKOLAI MAKSIMOVIC ALMA ATA SU

Title: Improved means for conveying liquid, or gaseous or dissolved plant nutriment to the soil

Abstract: 142,953. Davies, W. E. Feb. 25, 1919. Aerating and treating land fertilizer distributors. - In a process for treating land or soil, either on a large or a small scale, by the introduction of liquid, dissolved, or gaseous plant nutriment, a bed is formed below the soil e comprising a lower layer f<1> of bricks, briquettes, rock, tiles, and c., and an upper layer f of carbonaceous or organic material like peat, fuel, coco-nut shell, preferably moulded into slotted or grooved briquettes. The nutriment is supplied to the lower layer through a piping system q provided with the usual cocks and supply pipes communicating with reservoirs and the like. A drainage layer D with pipes E may be situated below the piping system q. Vertical perforated pipes m may extend from the bed to the air above. The system may be used to supply liquid nutriment, such as dissolved fertilizers as ammonium sulphate, ammonium nitrate, nitrites, sodium nitrate, calcium phosphates, sulphates, carbonates, carbohydrates, silicates, and dilute bases, or gaseous nutriment such as air, waste gases, sewage gas, products of combustion, ammonia, and c. The nutriment may be heated before being passed into the supply system, and the liquid nutriment may be bacterized. As examples of bacteria, azotobacter chroococcum, nitrose and nitro bacteria, anaerobic bacteria, and pseudomonas radicola are mentioned. The piping system may be used for drainage, with or without suction being applied.

Classifications:

International (IPC 8-9): A01G25/06 (Advanced/Invention);

A01G25/00 (Core/Invention)

International (IPC 1-7): A01G29/00

CPC: A01G25/06

European: A01G25/06

Publication number	Publication date	Application number	Application date
GB142953 A	19200520	GB19190004643	19190225

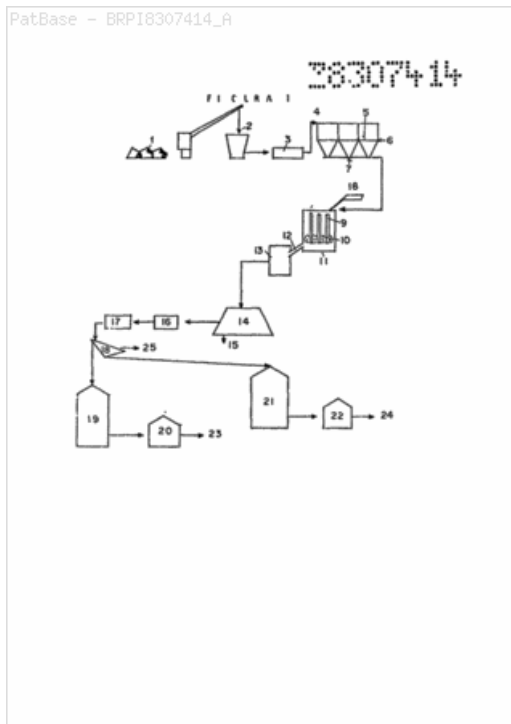
GB19190004643 19190225

Assignee(s): (std): WILLIAM EVERARD DAVIES

Abstract: Source: BRPI8307414A [PT] Patente de Invencao "PROCESSO PARA PROD UCAO DE FERTILIZANTES SI LI CO-FOSFATADOS BE K CO K) PROCESSO FERN LIZANTE". Descreve-se um processo para producao de fertl_izantes fosfatados e silleatados, proprios para aplica cao direta ao solo como adubo. Ainda, o referido fertlj_ zante pode ser adicionado ao liquido residual das destj. Iar 1 as de alcoo 1(vinhoto), antes, durante ou depots de uma eventual amoniacao a flmde se obter um fertilizante NPK completo. Este processo compreende a fusao de fofst tos naturais com diversos materiais, sendo caracterizado pela fusao de misturas de: i) fosfato natural, il) bfo t_i_ ta ou bioti la-xisto, de preferencia blotita, ili) calca rco dolomitico ou ainda dolomita, de preferencia calca reo dolomitico e Iv) carvao vegetal ou mineral. Este pro cesso compreende tambem, o correspondente a substituicao das duas materias primas, blotita ou biotlta xisto e ca_r vao, por sillcato grafitado ou sillcato grafitoso. Em qualquer caso se obtem um fertilizante proprio para so los tropicais, que alem do fosforo, contem pelo menos parte dos elementos nutrientes adicionais potassio, cac cio, magnesio, cobre, zinco_, manganes e ferro e por ultj_ VI O2 I M ••» I ••••• I •• I ••~ ss nto, mas nao em ultimo lugar, sill catos soluveis ou pajr cia 1 mente soluveis. A fusao pode ser realizada entre 1 000 degrees e 1500 degrees centigrade e durante um tempo compreendido entre 15 e 30 minutos. O material em fusao e submetido a um resfrlamto brusco, apos o que e moldo para obtencao do tamanho conveniente do grao para a aplicacao particular em vista. e possivel ainda Jogar com a solubilidade do produto obtido atraves da variacao do mn todo de resfrija 10 mento, natureza e proporcões da materia prima utilizada e finura do grao atraves da moagem. Desta forma se pode produzir, sob medida, um fertilizante adequado para a cultura, o solo e o clima das regioes tropicais de Intc lesse.

Machine translation: Invention patent "PROCESS to PROD FERTILIZER UCAO YOU READ CO-BE K K PHOSPHATE CO) FERN LIZANTE PROCESS. " Describes a process for production of fertj _ lizantes silleatados, phosphate and own to apply direct to the soil as compost dog. Still, the fertlj _ zante can be added to the residual liquid of destj. 1 alcoo 1 the Iar (vinasses), before, during or depots for a possible amoniacao the flmde a complete NPK fertilizer. This process includes the merger of 85 tos with different materials, natural being characterized by merger of: i) phosphate, il) bfoi _ i _ ta bioti la-shale, or preferably blotia, il) dolomitico or rco calca dolomite, preferably calca dolomitico reo and Iv) coal vegetable or mineral. This pro cess comprises also, corresponding to replacement of the two raw materials, blotita or blotia schist and ca _ will, by Ed Hardy sillcato or sillcato grafitoso. In any case if you get a fertilizer proprio Ios OS, that besides the phosphorus, contains at least part of the additional nutrients potassium elements, CJA, magnesium, copper, zinc, and iron and manganes _ by ultj _ SAW 02 I M * » I 4 I I . I ss f ss NT, but not in last place, sill catos soluveis or seybalogun CLA 1 mind soluveis. The merger can be held between 1000 and 1500 degrees centigrade degrees and during a time between 15:30 minutes. 0 material in merger and subjected to a resfriamen to blunt, after that and shape to obtain convenient size for the particular application in grao view. it is possible to still play with the solubility of the product obtained through the variation of mn all 10 resfrija ment, nature and proporcoes of the raw material used and fineness of the grao by grinding. This way you can produce, under measure, a fertilizer suitable for the culture, the soil and climate of the tropical regions of Intc read.

International (IPC 1-7): C05B17/00 C05B9/00 C05F11/02 C05G1/00

**Family:**

Publication number	Publication date	Application number	Application date
BRPI8307414 A	19850806	BR1983PI07414	19831110

Priority:

BR1983PI07414 19831110

Probable Assignee: ARAO HOROWITZ**Assignee(s):** (std): ARAO HOROWITZ ; JULIO PACHECO MEIRA ; JUNIOR SA**Assignee(s):** SA JUNIOR**Inventor(s):** (std): ARAO HOROWITZ ; HOROWITZ ARAO ; JULIO PACHECO MEIRA ; JUNIOR SA ; MEIRA JULIO PACHECO**Inventor(s):** SA JUNIOR**104) Family number: 3845802 (DE3440190A1)**

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Title: PROCESS AND DEVICE FOR THE PRODUCTION OF NITROGEN FERTILISER AND NITROGEN-ENRICHED BIOMASS FROM AIR

Abstract: Nitrous gases are generated from air using a thermal plasma process with the aid of a regeneration furnace with a low outlay of energy. The nitrous gases are completely or partially catalytically hydrogenated, it being possible to obtain ammonium nitrate. By direct nitration of biomasses, nitrogen-containing composts or feeds are produced.

Classifications:

International (IPC 8-9): A23K1/12 A23K1/22 A23K10/32 A23K50/15 B01D53/56 C01B21/32 C01C1/18 C05C5/04 (Advanced/Invention); A23K1/00 A23K1/22 B01D53/56 C01B21/00 C01C1/00 C05C5/00 (Core/Invention)

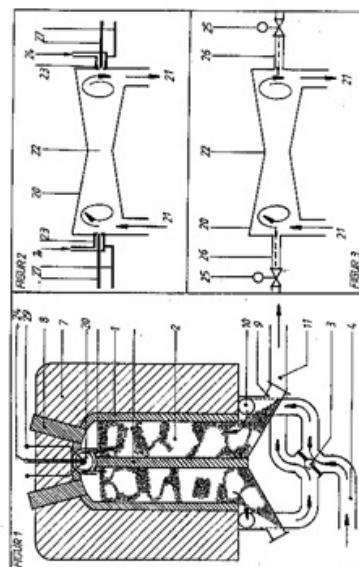
International (IPC 1-7): A23K1/00 B01D53/14 B01D53/34 B01J20/34 B01J6/00 C01B21/24 C04B2/10 C04B7/43 C05C11/00 C05C5/04

CPC: C05C5/04 A23K10/32 A23K50/15 C01B21/32 C01C1/185 B01D53/56

European: A23K1/12 A23K1/22 B01D53/56 C01B21/32 C01C1/18B C05C5/04

PatBase - DE3440190_R1

M.
 Name: 3845802
 Int. Cl. 7: C 05 C 11/00
 Anmeldungs- 1. November 1984
 Offenlegungsgg: 16. Mai 1986

**Family:**

Publication number	Publication date	Application number	Application date
DE3440190 A1	19860515	DE19843440190	19841101
DE3502565 A1	19860724	DE19853502565	19850123

Priority:

DE19843440190 19841101 DE19853502565 19850123

Probable Assignee: MICHEL KIM HERWIG

Assignee(s): (std): MICHEL KIM HERWIG

Inventor(s): (std): MICHEL KIM HERWIG ; MICHEL KIM HERWIG DIPL CHEM ; PILGRIMM HERBERT DR RER NAT

Inventor(s): PILGRIMM HERBERT DRRERNAT

105) Family number: 66780805 (WO17143415A1)

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Title: METHOD FOR PRODUCING PHOSPHATE FERTILIZERS FROM PHOSPHATE ROCK WITH A LOW P2O5 CONTENT AND USE OF TRIPLE SUPERPHOSPHATE OR DREGS FROM THE PRODUCTION OF PHOSPHORIC ACID

Abstract: The present invention relates to a method for producing fertilizers and to the use of triple superphosphate commercially available in bulk quantities or dregs from the production of phosphoric acid for enriching phosphate rock with a low P2O5 content and producing a fertilizer. The method according to the invention for producing fertilizers comprises the following steps: (a) mixing phosphate rocks with a low P2O5 content and triple superphosphate commercially available in bulk quantities or dregs from the production of phosphoric acid; (b) melting the material obtained in (a); and (c) cooling the melt obtained in step (b) with water, producing amorphous or vitreous granules.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
BR112018017306 A2	20190102	BR20181117306	20160225
WO17143415 A1	20170831	WO2016BR50041	20160225

Priority:

WO2016BR50041 20160225

Probable Assignee: MINERACAO CURIMBABA LTDA

Assignee(s): (std): MINERACAO CURIMBABA LTDA

Inventor(s): (std): CHAVASCO FERREIRA RAMIRO ; CURIMBABA SEBASTIAO ; WARWICK KERR DE PAIVA CORTES GABRIEL ; WARWICK KERR DE PAIVA CORTES ; RAMIRO CHAVASCO FERREIRA ; SEBASTIAO CURIMBABA

Agent(s): DANNEMANN SIEMSEN BIGLER AND IPANEMA MOREIRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

106) Family number: 19704809 (GB721876A)

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Title: Phosphate fertilisers and a process for their preparation

Abstract: A fertilizer essentially comprising calcium phosphate is produced by melting a phosphate, and quenching and granulating the molten mass so that the resulting particles have to an extent of 95 per cent by weight a size of 0.05-1 mm. and a greater energy content than silico-carnotite. (The expression "greater energy content than silico-carnotite" is explained.) The particles have a vitreous structure. If larger grains are produced they are broken down; the 5 per cent by weight smaller than 0.05 mm. may be left in the product. The higher the ratio P2O5:other acids (SiO2, B2O3, Al2O3 and c.) in the product, the smaller should be the particles. Chilling may be effected with water or steam, except that in this case, the vitreous form is obtained only when there are present with the phosphates equivalent or even larger quantities of metasilicates, borates, aluminates, and c. Irrespective of the proportions of these substances present, chilling may be effected with air or other gas in the absence of water or steam; or by contact with cool surfaces e.g. water cooled metal sheets. Fig. 2 shows a device for granulating the molten phosphate, air under pressure being supplied via tubes 6, 7 annulus 5 and radial distribution tubes 8 to an annular slot 11. In another construction, air is supplied tangentially to an annular chamber communicating directly with the annular slot surrounding the nozzle. The surface of the molten phosphate, e.g. Thomas slag, to be quenched may be enlarged with an inflating or foaming agent, e.g. coal tar, and c. Thus, tar or other gas-evolving substance may be spread on the surface of the metal sheets; or air charged with coke dust is used to blow the slag out of the converter, or is directed against the slag flowing therefrom. Atomized oil may alternatively be used. In most instances, other than in the case of Thomas slag, the phosphates are melted in shaft furnaces, which may be fired under oxidizing conditions by oil or gas burners. When coke is used, producing reducing conditions, loss of phosphorus is minimized by adding iron, iron ore, or a phosphate rich in iron, or by melting the raw phosphate with blast furnace slag, or other vitrifying additives, e.g. magnesia-containing minerals and slags, aluminates, borates, silicates, alkali metal compounds and fluorides.

Classifications:

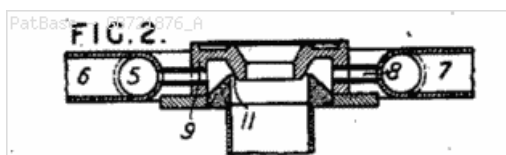
International (IPC 8-9): C05B13/02 (Advanced/Invention);

C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02



Family:

Publication number	Publication date	Application number	Application date
GB721876 A	19550112	GB19510012902	19510531

Priority:

Probable Assignee: HUTTENWERK HUCKINGEN A G**Assignee(s):** (std): HUTTENWERK HORDE A G ; HUTTENWERK HUCKINGEN A G ; THYSSEN HUETTE AG ; WESTFALENHUTTE DORTMUND A G**Assignee(s):** AUGUST THYSSEN HUTTE A G**107) Family number: 51931816** (WO12123378A1)

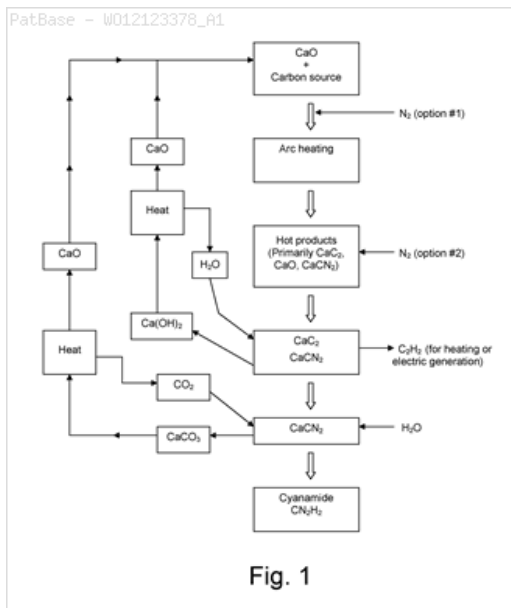
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Title: PRODUCTION AND USE OF CYANOGUANIDINE AND CYANAMIDE

Abstract: The present invention is concerned with a method of producing a composition comprising cyanoguanidine, the method comprising (a) using a source of energy to react a metal oxide with a source of carbon to produce a finely divided metal carbide at an elevated temperature and immediately reacting the hot finely divided metal carbide with nitrogen gas to form a metal cyanamide. In embodiments the method comprises the step of (b) reacting the metal cyanamide, together with any unreacted metal carbide, with water to decompose the metal carbide into acetylene and acetylene-related compounds and metal hydroxide. Furthermore, energy can be derived from the reaction by (c) combusting the acetylene and acetylene-related compounds to release energy. Furthermore metal hydroxide can be recovered from the process by (d) separating the metal cyanamide and the metal hydroxide for recycling in the production process. The cyanoguanidine can then be used, for example, as a fertilizer.

Classifications:**International (IPC 8-9):** C01C3/16 C01C3/18 (Advanced/Invention)**CPC:** C10L1/00 C10L2290/00 C10L2290/24 C10L2290/54

C07C277/02 C01C3/16 C01C3/18 C05C9/00 C07C273/02

European: C01C3/16 C01C3/18 C07C273/02 C07C277/02**Family:**

Publication number	Publication date	Application number	Application date
WO12123378 A1	20120920	WO2012EP54171	20120309
WO12123380 A2	20120920	WO2012EP54173	20120309
WO12123380 A3	20121220	WO2012EP54173	20120309

Priority:US20110464980P 20110311
US20110520236P 20110606US20110517521P 20110421
US20110571289P 20110624

US20110519574P 20110525

Probable Assignee: PUREGENERATION UK LTD**Assignee(s):** (std): GRAUPNER ROBERT KURT ; HULTINE J DUSTIN ; PUREGENERATION UK LTD ; VAN VECHTEN JAMES ALDEN**Assignee(s):** HULTINE J**Inventor(s):** (std): GRAUPNER ROBERT KURT ; HULTINE J DUSTIN ; VAN VECHTEN JAMES ALDEN**Inventor(s):** HULTINE J**Agent(s):** WEBSTER JEREMY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

108) Family number: 2074825 (GB2117748A)

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Title: A PROCESS FOR STABILISING UNSTABLE PELLETS OF PULVERENT MINERAL MATERIALS

Abstract: A process for stabilising pellets for agriculture and building construction which consist of pulverulent mineral materials such as iron ores, dolomite, or carbonate or phosphate salts and which, after agglomeration, are unstable by virtue of re-drying, hygroscopy or reaction with the atmosphere. After their formation by a known granulation build-up method using pelletising liquid, the pellets are provided with a coating of a mineral material which is either insoluble or difficultly soluble in water.

Classifications:**International (IPC 8-9):** B01J2/30 C05B19/00 C05G3/00 C22B1/24 (Advanced/Invention);

C05B19/00 C05G3/00 C22B1/14 (Core/Invention)

International (IPC 1-7): B01F B01J2/28 B01J2/30 C01F11/46 C03C C04B7/40 C05B19/00 C07C C22B1/14 C22B1/24 C22B1/242

Family:

Publication number	Publication date	Application number	Application date
BE896167 A	19830718	BE19832060049	19830316
CA1213734 A1	19861112	CA19830423321	19830310
DD207735 A5	19840314	DD19830248657	19830309
DE3209618 A1	19830922	DE19823209618	19820317
DK44883 A	19830918	DK19830000448	19830203
DK44883 A0	19830203	DK19830000448	19830203
FR2523481 A1	19830923	FR19830004289	19830316
GB2117748 A1	19831019	GB19830007210	19830316
GB2117748 B2	19860108	GB19830007210	19830316
GB8307210 A0	19830420	GB19830007210	19830316
IT1212713 A	19891130	IT19830020005	19830310
IT8320005 A0	19830310	IT19830020005	19830310
LU84693 A	19830908	LU19830084693	19830315
NL8300918 A	19831017	NL19830000918	19830314
SE8301316 A	19830918	SE19830001316D	19830310
SE8301316 A0	19830310	SE19830001316	19830310
SE8301316 L	19830918	SE19830001316	19830310

Priority:

DE19823209618 19820317 CA19830423321 19830310

Probable Assignee: GATTYS ING BUERO F J

Assignee(s): (std): F J GATTYS INGENIEURBUERO F ; F J GATTYS INGENIEURBUERO F CH ; F J GATTYS INGENIEURBUERO ; GATTYS INGENIEURBUERO FUR CHEM ; F J GATTYS INGENIEURBUERO FUE ; GATTYS VERFAHRENSTECH ; F J GATTYS INGENIEURBUERO GMBH ; GATTYS ING BUERO F J

Assignee(s): F J GATTYS VERFAHRENSTECHNIK GMBH ; GATTYS INGENIEURBUERO F J ; F J GATTYS INGENIEURBUERO FUR CHEM MASCHINEN UND APPARATEBAU ; GATTYS INGENIEURBUERO FUR CHEM MASCHINEN UND APPARATEBAU F J ; FIRMA F J GATTYS INGENIEURBUERO FUR CHEM MASCHINEN UND APPARATEBAU TE NEU ISENBURG BONDSREPUBLIC DUTSLAND ; GATTYS FRANZ J ; F J GATTYS INGENIEURBUERO ; F J GATTYS INGENIEURBUERO ; GATTYS INGENIEURBUERO F J ; F J GATTYS INGENIEURBUERO F CHEM MASCHINEN U APPARATEBAU DE ; F J GATTYS INGENIEURBUERO FUR CHEM MASCHINEN UND ; F J GATTYS INGENIEURBUERO FUR CHEM MASCHINEN UND APPARATEBAU ; F J GATTYS INGENIEURBUERO

Inventor(s): (std): GATTYS FRANZ J ; GATTYS FRANZ JOSEPH ; GATTYS FRANZ JOSEF ; GATTYS F J ; FRANZ JOSEF GATTYS ; F J GATTYS INGENIEURBUERO FUR ; F J GATTYS INGENIEURBUERO F

Inventor(s): F J GATTYS ; F J GATTYS INGENIEURBUERO FUR CHEM MASCHINEN U ; GATTYS FRANZ J DE ; FRANZ JOSEPH GATTYS

Agent(s): MARKS AND CLERK

109) Family number: 18172833 (GB170880A)

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Title: Improvements in or relating to the manufacture of sulphuric acid

Abstract: Sulphuric acid is obtained by calcining alunite and passing the evolved gases over the cooler parts of the alunite which by reason of the catalytic effect of the iron oxide it contains effects the re-combination of the sulphur dioxide and oxygen. The calcination may be performed in any closed type of furnace in which the dilution of the gases with air or furnace gases is avoided, but preferably one is used in which the crushed material fed in at the top is mechanically passed down a series of hearths the bottom one of which is heated by external means to a temperature of 700-900 DEG C. The cooled gases pass on to a condenser and sufficient water in the form of steam or a spray to form sulphuric acid, is injected either into the furnace or into the condenser. Specification 158,293 is referred to.

Classifications:

International (IPC 8-9): C01B17/74 (Advanced/Invention);

C01B17/00 (Core/Invention)

International (IPC 1-7): C01B17/74

CPC: C01B17/745

European: C01B17/74B

Family:

Publication number	Publication date	Application number	Application date
GB170880 A	19211107	GB19200012630	19200506

Priority:

GB19200012630 19200506

Probable Assignee: ALEXANDER MATHESON

Assignee(s): (std): ALEXANDER MATHESON

110) Family number: 15296834 (US2006015966A)

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Title: TRANSGENIC PLANT CELLS AND PLANTS HAVING MODIFIED ACTIVITY OF THE GBSSI AND OF THE BE PROTEIN

Abstract: Transgenic plant cells and plants are described which synthesize a starch which is modified in comparison to wild-type plant cells and plants and show a decrease in the activity of GBSSI and BE proteins. Furthermore, the modified starches obtainable from these plant cells and plants are described, and processes for their preparation.

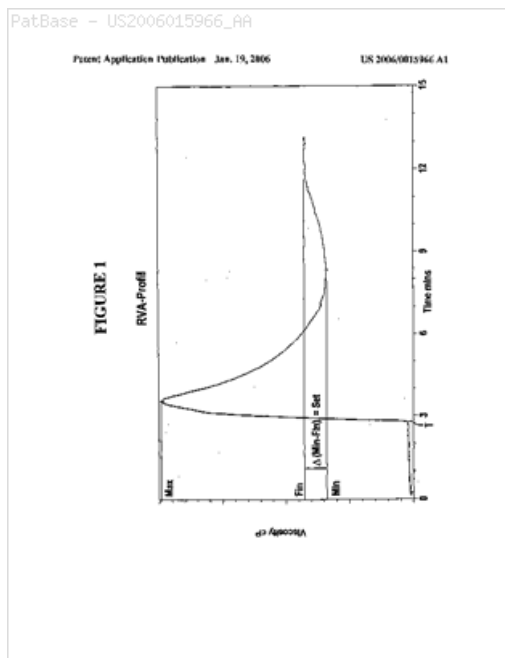
Classifications:

International (IPC 8-9): A01H1/00 A01H5/00 A23L1/0522 C07H21/04

C08B30/04 C08B30/20 C08B31/06 C12N15/09 C12N15/56

C12N15/82 C12N5/04 C12N5/10 C12N5/14 C12N9/10

C12P19/04 (Advanced/Invention);
A01H5/00 C12N15/09 C12N5/10 (Advanced/Non-invention);
A01H1/00 A01H5/00 A23L1/0522 C07H21/00 C08B30/00 C08B31/00
C12N15/09 C12N15/56 C12N15/82 C12N5/04 C12N5/10 C12N5/14
C12N9/10 C12P19/00 (Core/Invention)
International (ipc 1-7): A01H5/00 A23L1/0522 C08B30/20
C08B31/06 C12N15/09 C12N15/29 C12N15/56 C12N15/82 C12N5/0
C12N5/00 C12N5/10 C12N5/14 C12N9/10 C12P19/04
CPC: C12N15/8245
European: C12N15/82C4B2
US: 127/67 435/101 435/417 435/419 435/468 536/23.2 536/23.6
536/236 536/24.5 536/245 800/284 800/285 800/286 800/317.2



Family:

Publication number	Publication date	Application number	Application date
AT420187 E	20090115	AT20000954587T	20000804
AU200066992 A1	20010313	AU20000066992	20000804
AU200066992 A5	20010313	AU20000066992D	20000804
AU782182 B2	20050707	AU20000066992	20000804
CA2381163 AA	20020201	CA20002381163	20000804
DE19937643 A1	20010222	DE19991037643	19990812
DE50015519 D1	20090226	DE20005015519	20000804
DK1203087 T3	20090420	DK20000954587T	20000804
EP1203087 A2	20020508	EP20000954587	20000804
EP1203087 B1	20090107	EP20000954587	20000804
JP2003507034 T2	20030225	JP20010517667T	20000804
JP4871466 B2	20120208	JP20010517667	20000804
US2006015966 AA	20060119	US20050167600	20050628
US2009050136 AA	20090226	US20080260014	20081028
US6940001 BA	20050906	US20000636289	20000810
WO0112782 A2	20010222	WO2000EP07575	20000804
WO0112782 A3	20010531	WO2000EP07575	20000804

Priority:

DE19991037643 19990812 WO2000EP07575 20000804 US20000636289 20000810
US20050167600 20050628 US20080260014 20081028

Probable Assignee: BAYER AG

Assignee(s): (std): BAYER CROPSCIENCE AG ; BAYER CROPSCIENCE GMBH ; BAYER CROPSCIENCEAG ; AVENTIS CROPSCIENCE GMBH

Assignee(s): BAYER AG ; LANDSCHUTZE VOLKER ; BAYER INTELLECTUAL PROPERTY GMBH ; BAYER CROPSCIENCE GMBH GEB

Inventor(s): (std): LANDSCHUETZE VOLKER ; LANDSCHUTZE VOLKER ; VOLKER LANDSCHUTZE

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GOUDREAU GAGE DUBUC; BEYER ANDREAS ET AL; HUNTON AND WILLIAMS LLP, INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP,INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

111) Family number: 62000836 (US2017217849A)

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Title: METHOD FOR THE PRODUCTION OF SULPHATE OF POTASH GRANULATES, SULPHATE OF POTASH GRANULATE OBTAINED THEREBY, AND USE THEREOF

Abstract: The invention relates to a method for producing sulphate of potash granulates, wherein 0.1 to 7.5 wt percent of a sodium salt selected from among sodium chloride, sodium sulphate, sodium sulphate hydrates, sodium hydroxide and mixtures thereof are added to the sulphate of potash during the granulation process, the percentage by weight being in relation to the sulphate of potash used. In addition, 0.1 to 2.5 wt percent of water are added prior to or during the granulation process. The invention also relates to the granulates obtained by said method as well as the use of sodium salts and glaserite and mixtures thereof for improving the mechanical properties of sulfate of potash granulates. The sulphate of potash granulates produced by the method of the invention have significantly greater bursting strength and significantly greater abrasion resistance than granulates known from the prior art.

Classifications:

International (ipc 8-9): B01J2/00 B01J2/22 C01D1/04 C01D3/04 C01D5/00 C05D1/00 C05D1/02 C05G3/00 C05G5/00 (Advanced/Invention)

CPC: C01D5/002 C05D1/005 C05G3/0088 C01D3/04 B01J2/22 C01P2004/61 C01P2006/11 C01D5/004 C05D1/02

Family:

Publication number	Publication date	Application number	Application date
AU2015327464 AA	20170420	AU20150327464	20150930
AU2015327464 BB	20180510	AU20150327464	20150930
CA2963011 AA	20170329	CA20152963011	20150930
CL2017000773 A1	20171215	CL20170000773	20170330
CN107001059 A	20170801	CN201580063537	20150930
DE102014014099 A1	20160331	DE201410014099	20140930
EP3201158 A2	20170809	EP20150795107	20150930
RU2668851 C1	20181003	RU20170114967	20150930
US2017217849 AA	20170803	US20150515436	20150930
WO16050232 A2	20160407	WO2015DE000476	20150930
WO16050232 A3	20160818	WO2015DE000476	20150930

Priority:

DE201410014099 20140930 WO2015DE000476 20150930

Probable Assignee: K AND S KALI GMBH**Assignee(s):** (std): K AND S KALI GMBH ; K S KALI GMBH**Assignee(s):** WALDMANN LUDGER ; REST TORSTEN ; KEIDEL ROLAND ; MULLER GOLDKUHLE MARCEL ; BAUCKE GUIDO ; DIETRICH ARMIN**Inventor(s):** (std): BAUCKE GUIDO ; DIETRICH ARMIN ; KEIDEL ROLAND ; REST TORSTEN ; MUELLER GOLDKUHLE MARCEL ; MULLER GOLDKUHLE MARCEL ; WALDMANN LUDGER**Agent(s):** WATERMARK INTELLECTUAL PROPERTY PTY LTD; GOWLING WLG CANADA LLP; ESTUDIO CAREY LTDA; YURIDICHESKAYA GORODISSKI I PARTNERY OOO FA**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**112) Family number: 20371863** (GB533849A)

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Title: IMPROVEMENTS IN ARTIFICIAL FERTILISERS AND IN THE METHOD OF MANUFACTURING THE SAME**Abstract:** (Claim 1) 1 A process for the manufacture of an artificial fertiliser which consists in blending an organic ingredient, an 115 inorganic ingredient and sulphur, in heat treating the mixture and in projecting the sulphur sublimed by the heat treatment through a falling mass of the heat treated mixture 120**Classifications:****International (ipc 8-9):** C05B1/02 C05B7/00 C05D3/02 C05F1/00 (Advanced/Invention);

C05B1/00 C05B7/00 C05D3/00 C05F1/00 (Core/Invention)

International (ipc 1-7): C05G1/00**CPC:** C05D3/02 C05B1/02 C05B7/00 C05F1/005 Y02P20/145 Y02A40/203**European:** C05B1/02 C05B1/02+B17/00 C05B1/02+B17/00+D3/02+D9/00+F1/00+F11/00 C05B7/00

C05B7/00+B17/00+D3/02+D9/00+F1/00+F11/00 C05B7/00+B17/00+D3/02+D9/00+F1/00D+F11/00 C05D3/02

C05D3/02+D9/00 C05F1/00D C05F1/00D+F11/00

Family:

Publication number	Publication date	Application number	Application date
GB533849 A	19410221	GB19390021093	19390720

Priority:

GB19390021093 19390720

Probable Assignee: JOHN RAY**Assignee(s):** (std): JOHN RAY**113) Family number: 49080864** (US2014038266A)

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Title: OIL ABSORBENT COMPOSITION**Abstract:** The invention relates to a method of preparing an oil absorbent composition. The method comprises heating and then de-mineralising a precursor plant material under conditions suitable to produce an oil absorbent composition comprising charcoal. The invention extends to oil absorbent compositions per se, such as charcoal-based compositions, and to various uses of the compositions for efficiently and rapidly absorbing spilled oil, for example from water surfaces, or from bituminous sands.**Classifications:****International (ipc 8-9):** B01D B01D17/02 B01J B01J20/02

B01J20/04 B01J20/20 B01J20/28 B01J20/30 B01J20/32 B09C1/08

C01B31/02 C01B32/05 C02F C02F1/28 C02F1/68 C09K C09K3/32

C10B53/02 C12P C12P1/04 (Advanced/Invention);

B01D B01J C02F C09K C12P (Subclass/Invention)

CPC: B01J20/30 B01J20/324 C10B53/02 Y02E50/14 B01D17/0202

B01J20/0229 B01J20/041 B01J20/28004 B01J20/28011

B01J20/28085 B01J20/3204 B01J20/3236 B01J20/3246 B01J20/3268

B01J2220/4825 B01J2220/4831 B01J2220/485 C02F1/285 C02F1/286

C02F1/40 C02F1/681 C02F1/72 C02F3/327 C02F3/344 C02F2101/32

C02F2103/007 C02F2303/16 C02F2305/06 C05D9/02 C05F11/02

C05G1/00 C02F1/283 B01J20/20 C02F1/288 C09K3/32 B09C1/08

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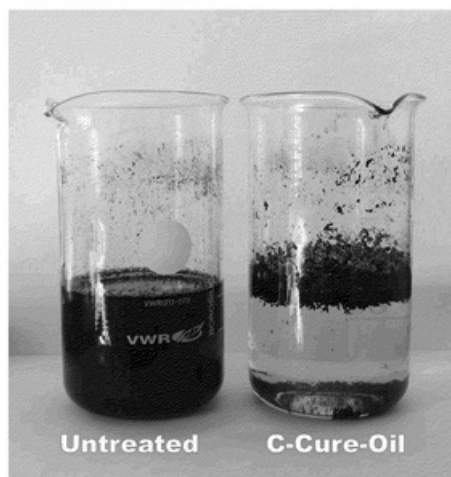
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B01J20/28B12 B01J20/28B4 B01J20/28F12F B01J20/30P

B01J20/32B4 B01J20/32F4D B01J20/32F8B4 B01J20/32F8F
C02F1/28L C02F1/68C C05D9/02 C05F11/02 C05G1/00 C09K3/32
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M02F1/28H M02F1/40 M02F1/72 M02F101/32 M02F103/00H
M02F3/32B M02F3/34D M02F303/16 M02F305/06
US: 210/665 210/694 252/175 252/178 252/181 405/264 435/252.1
435/252.5 435/253.3 502/401 502/406 502/416 502/418 502/426

PatBase - US2014038266_AA



Family:

Publication number	Publication date	Application number	Application date
AP201307221 A0	20131130	AP20130007221	20120328
AP4058 A	20170308	AP20130007221	20120328
AU2012238413 AA	20121011	AU20120238413	20120328
AU2012238413 BB	20170119	AU20120238413	20120328
CA2831975 AA	20131001	CA20122831975	20120328
CN103732319 A	20140416	CN201280027807	20120328
EP2694201 A2	20140212	EP20120718720	20120328
GB201105961 A0	20110518	GB20110005961	20110408
GB201117521 A0	20111123	GB20110017521	20111011
GB2489764 A1	20121010	GB20110017521	20111011
GB2489764 B2	20180725	GB20110017521	20111011
NZ616152 A	20141224	NZ20120616152	20120328
US2014038266 AA	20140206	US20130045347	20131003
WO12136981 A2	20121011	WO2012GB50683	20120328
WO12136981 A3	20121220	WO2012GB50683	20120328
ZA201307479 A	20141223	ZA20130007479	20131007

Priority:

GB20110005961 20110408 GB20110017521 20111011 WO2012GB50683 20120328

Probable Assignee: FORESTRY COMMISSION

Assignee(s): (std): DE LEIJ FRANCISCUS ANTONIUS ANNA MARIA ; FORESTRY COMMISSION ; FORESTRY COMMISSION THE ; HUTCHINGS TONY ; UNIV SURREY THE ; UNIV SURREY ; STRATFORD JAMES ; UNIV OF SURREY

Assignee(s): OF SURREY UNIV ; THE UNIVERSITY OF SURREY ; THE FORESTRY COMMISSION ; OF SURREY FORESTRY COMMISSION UNIV ; UNIVERSITY OF SURREY THE

Inventor(s): (std): STRATFORD JAMES ; DE LEIJ FRANCISCUS ANTONIUS ANNA MARIA ; HUTCHINGS TONY ; STRATFORD JAMES PETER ; LEIJ FRANCISCUS ANTONIUS ANNA MARIA DE ; FRANCISCUS ANTONIUS ANNA MARIA DE LEIJ ; TONY HUTCHINGS ; JAMES PETER STRATFORD

Agent(s): ALLENS PATENT AND TRADE MARK ATTORNEYS; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; HUTTER ANTON; HUTTER ANTON ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

114) Family number: 49146867 (WO12143684A2)

© PatBase

Title: COMPOSITIONS FOR GROWTH AND VIGOUR FROM OILSEEDS

Abstract: Coating composition for applying to oilseeds from which roots and shoots are capable of growing, wherein the said coating composition comprises one or more organic materials having a melting point of = 50 degrees Centigrade and one or more additives, methods of making such compositions and coated seeds of oilseed plants.

Classifications:

International (IPC 8-9): A01C1/06 A01N25/00 A01N25/08 A01N25/12 A01N25/24 A01N63/00 A01P21/00 C05F11/10 C05G3/00 C09D191/06 C09D5/00 C09D5/03 C09D7/12 (Advanced/Invention)

CPC: C08L2205/18 C09D191/06 A01C1/06 A01N25/12 A01N25/24 A01N63/00 C09D5/00 C09D5/031 A01N25/08 A01N25/00 C09D7/40

European: A01N25/00 A01N25/08

Family:

Publication number	Publication date	Application number	Application date
CA2841043 AA	20140106	CA20122841043	20120419
CA2841043 C	20150224	CA20122841043	20120419
GB201106762 A0	20110601	GB20110006762	20110420
GB201206969 A0	20120606	GB20120006969	20120419
GB2490248 A1	20121024	GB20120006969	20120419
GB2490248 B2	20151202	GB20120006969	20120419

WO12143684 A2	20121026	WO2012GB00366	20120419
WO12143684 A3	20130613	WO2012GB00366	20120419

Priority:

GB20110006762 20110420 WO2012GB00366 20120419

Probable Assignee: EXOSECT LTD

Assignee(s): (std): EXOSECT LTD ; JESSOP NICHOLAS HUGH HYLTON

Assignee(s): EXOSECT LIMITED

Inventor(s): (std): JESSOP NICHOLAS HUGH HYLTON

Inventor(s): NICHOLAS HUGH HYLTON JESSOP

Agent(s): RIDOUT AND MAYBEE LLP; DR WALTHER WOLFF AND CO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

115) Family number: 269873 (US3713803A)

© PatBase

Title: PRODUCTION OF PHOSPHATE FERTILIZERS

Abstract: A phosphate fertilizer is prepared from a mixture of phosphate rock, silica, and an alkali metal hydroxide solution. The alkali metal hydroxide solution is concentrated and at least partially carbonated by carbon dioxide containing gases, before it is incorporated in the mixture. The granulated mixture is then calcined in a rotary kiln, and the hot waste gases of the kiln are used for the preceding concentrating and carbonating step.

Classifications:

International (ipc 8-9): A43B5/04 C05B13/02 C05B13/06

G05G1/015 G05G1/28 (Advanced/Invention);

A43B5/04 C05B13/00 G05G1/00 (Core/Invention);

C05B (Subclass/Invention)

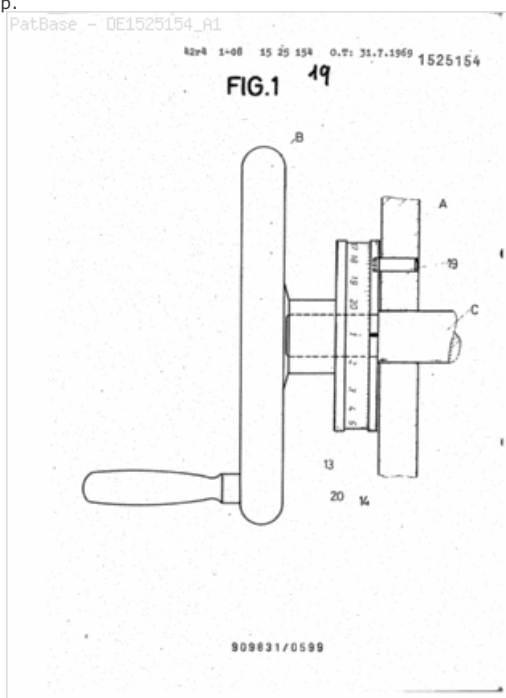
International (ipc 1-7): A43B11/00 A43B5/00 A43B5/04 C05B13/00

C05B13/02 C05B13/06 G05B13/02 G05G1/08

CPC: G05G1/015 C05B13/02 A43B5/04

European: A43B5/04 C05B13/02 G05G1/015 G05G1/28

US: 71/4.5 71/45 71/47



Family:

Publication number	Publication date	Application number	Application date
BE697310 A	19671002	BE19670697310	19670420
BE713005 A	19680731		00000000
CH506259 A	19710430	CH19680009890	19680703
DE1266768 B	19680425	DE1966K059051	19660421
DE1294978 B	19690514	DE1966K060235	19660913
DE1294979 B	19690514	DE1966K060721	19661116
DE1525154 A1	19690731	DE19661525154	19660315
DE1592687 A1	19710204	DE19661592687	19661116
DE1592687 B2	19740307	DE19661592687	19661116
DE1592687 C3	19741017	DE19661592687	19661116
DE1592690 A1	19710121	DE1967K062033	19670417
DE1592690 B2	19761223	DE1967K062033	19670417
DE1592690 C3	19770804	DE1967K062033	19670417
DK116666 B	19700202	DK19670004555	19670912
ES339549 A1	19680516	ES19670339549	19670420
ES351238 A2	19690601	ES19680351238	19680305
FI49819 B	19750630	FI19670002450	19670913
FI49819 C	19751010	FI19670002450	19670913
FR1531453 A	19680705	FR19670103250	19670419
FR94245 E	19690718	FR19680145492	19680326
GB1149672 A	19690423	GB19670017579	19670417
GB1165111 A	19690924	GB19680015914	19680402
IL27812 A1	19700917	IL19670027812	19670418
IL29696 A1	19711020	IL19680029696	19680326

NL153510 B	19770615	NL19670012525	19670913
NL6712525 A	19680314	NL19670012525	19670913
NO115780 B	19681202	NO19670169706	19670912
SE326460 B	19700727	SE19670012511	19670911
SU374807 D	19730320	SU19681233290	19680411
US3713803 A	19730130		00000000

Priority:

DE1966K059051 19660421 DE1966K060235 19660913 DE1966K060722 19661116
DE1966K060721 19661116 DE1967K062033 19670417 FR19670103250 19670419
DE1967K059708 19671214 DE1967K059829 19671227

Probable Assignee: KALI CHEMIE AG

Assignee(s): (std): KALI CHEMIE AG ; KIRSCHER GERHARD ; KLEINLAGEL FRIEDR SCHUHFAB

Assignee(s): KALI CHEMIE AKTIENGESellschaft HANNOVER BONDSREPUBLIC DUTSLAND ; KALI CHEMIE HANNOVER BONDSREPUBLIC DUTSLAND AG ; KALI CHEMIE AKTIENGESellschaft ; KALI-CHEMIE AG 3000 HANNOVER ; KALI CHEMIE AG 3000 HANNOVER ; KALI CHEMIE AG DT ; FRIEDRICH KLEINLAGEL KG SCHUHFABRIKEN ; FRIEDRICH KLEINLAGEL SCHUHFABRIKEN KG ; KALI CHEMIE A G

Inventor(s): (std): ULRICH DR ; RUDOLF DR ; KIRSCHER GERHARD ; HOLST RUDOLF DR ; HOLST RUDOLF ; HOLST DR RUDOLF ; HOLST ; HAUSCHILD ; HAUSCHILD ULRICH DR ; HAUSCHILD ULRICH ; HOLST R ; HAUSCHILD U ; HAUSCHILD DR ULRICH ; HAUSCHILD ; FRIEDRICH KLEINLAGEL ; ERICH STERN

Inventor(s): 3000 HANNOVER ; ULRICH HAUSCHILD ; HAUSCHILD DRULRICH ; HOLST DRUDOLF ; HAUSCHILD U DT ; HOLST R DT ; KLEINLAGEL FRIEDRICH ; STERN ERICH ; RUDOLF HOLST

Agent(s): REINHOLD COHN AND PARTNERS

116) Family number: 18583877 (GB301022A)

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Title: Process for the production of calcined phosphates

Abstract: Calcium and double phosphates.-The process of producing citrate-soluble phosphates by calcining crude phosphates in admixture with alkali carbonates or salts or magnesium compounds or mixtures thereof and silica, with or without the use of steam; is carried out in two stages, the first being effected at temperatures below the fusion point of the original mixture and being continued until the bulk of the fluorine has been driven out, and the decomposition being then completed at higher temperatures, whereby fusion at the higher temperature is avoided. In examples, a crude phosphate containing 4.12 per cent of fluorine as calcium fluoride is heated with sodium carbonate and quartz sand (a) in a reverberatory furnace at 900-950 C. for two hours without, or for one hour with, steam and then for half an hour at. 1150 C., (b) in a rotary furnace in which the temperature is maintained at 600 C. in the first quarter, 800-1000 C. in the two middle quarters, and 1150 C. in the last quarter; and a mixture of the phosphate with quartz sand, potassium sulphate, and calcium carbonate or with quartz sand and magnesium or magnesium-potassium sulphate is treated in a rotary furnace heated as above in the presence of steam. Specification 237,875 is referred to.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);
C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB301022 A	19290718	GB19280032612	19281108

Probable Assignee: KALI CHEMIE AG

Assignee(s): (std): KALI CHEMIE AG

Assignee(s): KALI CHEMIE AKTIENGESellschaft

117) Family number: 626878 (BRPI8400294A)

© PatBase

Title: APERFEICOAMENTO DO PROCESSO PARA OBTENCAO DE FERTILIZANTE FOSFATADO WHILE THE PROCESS FOR OBTAINING OF PHOSPHATIC FERTILIZER (Machine translation)

Abstract: Source: BRPI8400294A [PT] RESUMO: Patente de Invencao "APERFEICOAMENTO DO PROCESSO PARA OBTENCAO DE UM FERTILIZANTE FOSFATADO", por acidulacao parcial de rochas fosfaticas, caracterizado por utilizar fosfatos umidos, com baixos teos 5 res de PgOg e elevados teores de contaminantes, utilizando como agente de acidulacao, um ou mais acidos inorganicos fortes, tais como o rruirico, o fosforico e o sulfurico, sendo a etapa de reacao destinada a producao de fertilizante fosfatado farelado, ou ainda, de material a ser granulado para a producao de fertilizante fosfatado gra 10 nulado. A incorporacao de compostos portadores de elementos macronutrientes e de micronutrientes e possivel tanto na etapa de reacao como na granulacao, sendo os produtos obtidos, nas formas farelada ou granulada, fertilizantes com os nutrientes incorporados. O periodo de cura do material entre as etapas de reacao e de granulacao, pode ser estabelecido de acordo com o tipo de instalacao industrial e das caracteristicas do produto, e pode variar desde 0 a 20 dias. O produto assim obtido e um fertilizante fosfatado parcialmente acidulado.

Machine translation: Summary: Invention patent "PROGRESS of the PROCESS to DOWNLOAD APPLICATION of PHOSPHATIC FERTILIZER", by partial acidulation of phosphatic rocks characterized by using damp with low phosphate content 5 res PgOg high levels of contaminants, and using as an acidulation agent, one or more inorganic strong acids, such as the rruiric, the nitric, sulphuric and phosphoric and the reaction step aimed at production of phosphatic fertilizer Przemyslaw branny, or material to be granulated to the production of phosphatic fertilizer gra nulado 10. The incorporation of persons with macronutrient elements compounds and of micronutrients is possible both in reaction as in step granulation, being the products obtained in the mash or pellet forms-of, fertilizers with nutrients. 0 period of curing material between steps and granulation reaction, can be laid 15 acid according to the type of installation and the characteristic-industrial product case, and can range from 0 to 20 days. The product thus obtained at-and a partially acidulated phosphate fertilizer.

Classifications:

International (IPC 8-9): C05B11/04 (Advanced/Invention);
C05B11/00 (Core/Invention)

International (IPC 1-7): C05B11/04

Family:

Publication number	Publication date	Application number	Application date
BRPI8400294 A	19850409	BR1984PI00294	19840120

Priority:

BR1984PI00294 19840120

Probable Assignee: ARAXA FERTILIZANTES PROD QUIM

Assignee(s): (std): ARAXA FERTILIZANTES PROD QUIM

Assignee(s): ARAXA S A FERTILIZANTES E PRODUTOS QUIMICOS

Inventor(s): (std): CARRASCO OSCAR GUILHERME ORDON ; JOSE PIMENTA DOS REIS ; LAURO AKIRA TAKATA ; OSCAR GUILHERME ORDONEZ CARRAS ; REIS JOSE PIMENTA DOS ; RIBEIRO ROBINSON ; ROBERTO MATTIOLI SILVA ; ROBINSON RIBEIRO ; SILVA ROBERTO MATTIOLI ; TAKATA LAURO AKIRA

Inventor(s): OSCAR GUILHERME ORDONEZ CARRASCO

118) Family number: 48530882 (AU2010213380A)

© PatBase

Title: Galvanic waste reuse

Abstract: A readily applicable and cost-effective means of amending micronutrient deficiencies and adverse sodicity effects in farm land is described. The soil treatment agents may be sourced from waste or byproduct streams to deliver further positive environmental outcomes. -25-

Classifications:

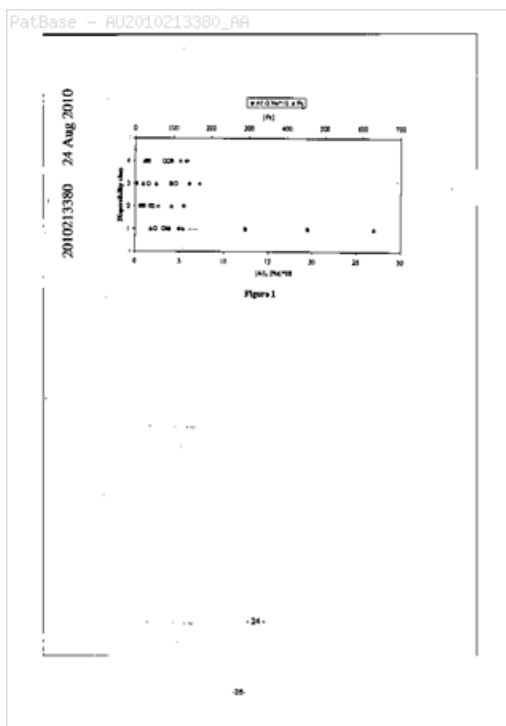
International (IPC 8-9): C05B11/04 C05D9/02

C09K17/02 (Advanced/Invention);

C02F103/16 (Advanced/Non-invention)

CPC: C05D9/02

European: C05D9/02



Family:

Publication number	Publication date	Application number	Application date
AU2010213380 AA	20110317	AU20100213380	20100824

Priority:

AU20090904125 20090827 AU20100213380 20100824

Probable Assignee: AGR SCIENCE AND TECH PTY LTD

Assignee(s): (std): AGR SCIENCE AND TECH PTY LTD

Assignee(s): AGR SCIENCE AND TECHNOLOGY PTY LTD ; TOX FREE QUEENSLAND PTY LTD

Inventor(s): (std): CALOS NICHOLAS JAMES ; CHAPPLE GREGG LEWIS

Inventor(s): GREGG LEWIS CHAPPLE ; NICHOLAS JAMES CALOS

Agent(s): AGR SCIENCE AND TECHNOLOGY PTY LTD

119) Family number: 22629908 (US2863726A)

© PatBase

Title: PROCESS FOR THE JOINT MANUFACTURE OF PORTLAND CEMENT AND SULFUR

Abstract: (Claim 1) A process for the joint manufacture of Portland cement clinker, sulfur and hydrogen sulfide which comprises the steps of: (a) feeding a mixture of a calcium sulfate-containing raw material, a source of alumina and a source of silica, in proportions to produce, Portland ce- I 0 ment clinker, to a rotary kiln and burning said mixture in a reducing atmosphere containing carbon monoxide to produce a calcine: containing calcium sulfide and kiln gases containing sulfur and hydrogen sulfide; (b) recovering sulfur and hydrogen sulfide from the kiln. gases of 1 5 said btirning; and (c) burning the calcine from step (a) in a second rotary kiln in an oxidizing atmosphere to a state of incipient fusion to oxidize the calcium sulfide to calcium sulfate and to obtain a Portland cement clinker.

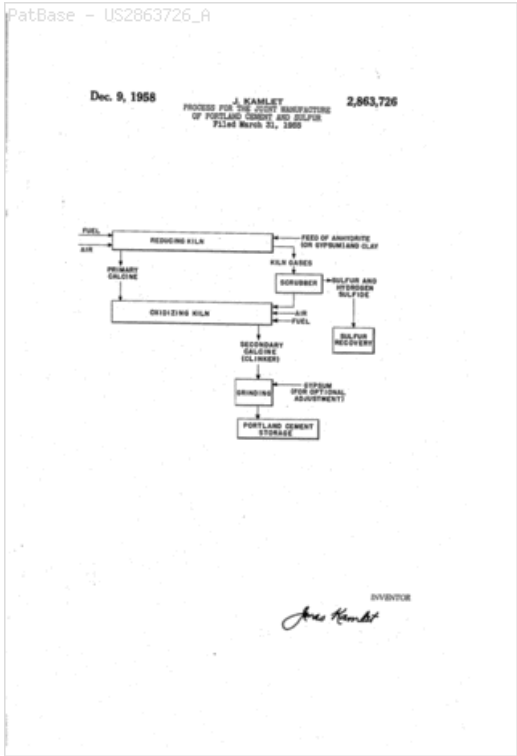
Classifications:

International (IPC 8-9): C01B17/06 C01B17/16

C04B7/04 (Advanced/Invention);

C01B17/00 C04B7/00 (Core/Invention)

CPC: C01B17/06 C01B17/164 C04B7/04
European: C01B17/06 C01B17/16F C04B7/04
US: 106/752 106/765 106/770 423/563 423/569



Family:

Publication number	Publication date	Application number	Application date
US2863726 A	19581209	US19550498449	19550331

Priority:

US19550498449 19550331

Probable Assignee:	JONAS KAMLET
Assignee(s): (std):	JONAS KAMLET
Inventor(s): (std):	JONAS KAMLET
Inventor(s):	KAMLET JONAS

120) Family number: 29094910 (US2005187323A) © PatBase

Title: METHOD FOR COLOURING FERTILISERS

Abstract: The invention relates to a method for colouring fertilisers, characterised in that a pigment-preparation containing 5-60 wt.- percent of at least one pigment, 40-95 wt.- percent of a paraffin oil and/or vegetable oil, 0 10 wt.- percent of a dispersing agent or dispersing agent mixture and 0-5 wt.- percent usual additives is produced, each of the percentages being in relation to the total weight of the pigment preparation; the pigment-preparation is optionally diluted with paraffin oil and/or vegetable oil and the pigment preparation or the diluted pigment-preparation is applied to the fertiliser which is to be coloured.

Classifications:

International (IPC 8-9): C05G3/00 (Advanced/Invention);
C05G3/00 (Advanced/Non-invention);
C05G3/00 (Core/Invention)

International (IPC 1-7): C05G3/00 C08L1/00

CPC: C05G3/0035 C05G3/00

European: C05G3/00 C05G3/00B2H

US: 524/190 524/190S 524/358

düngemitteln, fertiliser

Family:

Publication number	Publication date	Application number	Application date
CN1310849 C	20070418	CN20038007280	20030314
CN1642877 A	20050720	CN20038007280	20030314
DE10214591 A1	20031016	DE20021014591	20020403
DE50310109 D1	20080821	DE20035010109	20030314
EP1492744 A1	20050105	EP20030712015	20030314
EP1492744 B1	20080709	EP20030712015	20030314
ES2307910 T3	20081201	ES20030712015T	20030314
JP2005527454 T2	20050915	JP20030580248T	20030314
KR20040091785 A	20041028	KR20047015693	20030314
US2005187323 AA	20050825	US20050510086	20050425
WO03082776 A1	20031009	WO2003EP02675	20030314

Priority:

DE20021014591 20020403 WO2003EP02675 20030314

Probable Assignee: CLARIANT PRODUKTE DEUTSCHLAND GMBH

Assignee(s): (std): CLARIANT GMBH ; CLARIANT PRODUKTE DEUTSCHLAND ; HARZ ANDREAS ; MUELLER OLAF

Assignee(s): CLARIANT PRODUKTE DEUTSCHLAND GMBH

Inventor(s): (std): MUELLER OLAF ; OLAF HARZ ANDREAS MUELLER ; OLAF MUELLER ; MULLER OLAF ; ANDREAS HARZ ; HARZ ANDREAS

Inventor(s): HARZ ANDREAS MUELLER OLAF

Agent(s): HITOSHIO AKIO; TSUBOKURA MICHIAKI; ONO MAKOTO; OSAKI KATSUMASA; KAWAGUCHI YOSHIO; CLARIANT INTELLECTUAL PROPERTY DEPARTMENT CORP

Designated states: AT BE BG CH CN CY CZ DE DK EE ES FI FR GB GR HU IE IT JP KR LI LU MC NL PT RO SE SI SK TR US

121) Family number: 42069920 (IN00211DE2002A)

© PatBase

Title: A PROCESS FOR THE MANUFACTURE OF FLY ASH BASED SOIL CONDITIONER CUM FERTILIZER

Abstract: This invention relates to a process for the manufacture of fly ash based soil conditioner cum fertilizer. The soil conditioner is based on fly ash, a waste material. The soil conditioner cum fertilizer essentially consists of fly ash, rock phosphate, potassium chloride (muirite of potash), urea, humic acid and bio-fertilizers. The bio-fertilizer used is Rhizobium, Azotobacter and Phosphobacterium either singly or in a mixture. This soil conditioner cum fertilizer is suitable for all types of soils and can be used under normal conditions for effecting improvement in crop productivity.

Classifications:

International (IPC 1-7): C05F7/00

Family:

Publication number	Publication date	Application number	Application date
IN00211DE2002 A	20080801	IN2002DE00211	20020311
IN230555 B	20090313	IN2002DE00211	20020311

Probable Assignee: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Assignee(s): COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Inventor(s): SANGEET KUMAR JHA ; RAMESH CHANDRA TRIPATHI ; NISHANT KUMAR SRIVASTAVA ; LAL CHAND RAM ; GULAB SINGH

122) Family number: 18336921 (GB158293A)

© PatBase

Title: Improvements in or relating to the utilisation of alunite ore

Abstract: Sulphur oxides are obtained by calcining alunite in a closed retort at 700-900 DEG C., or in a furnace having a number of superposed hearths, the lower hearth or hearths being heated externally to the same temperature. ALSO: A soluble calcium phosphate or a manure containing it in admixture with potassium sulphate, is prepared by calcining the alunite and passing the gaseous products into a tower or chamber containing the phosphate with or without calcined alunite, water spray or steam being added if necessary. The calcination of the alunite may be effected in a closed retort at 700-800 DEG C. The reactions are completed on storing the product. According to the Provisional Specification, the gases arising from the calcination of alunite may be led over calcined alunite for the production of aluminium sulphate, and alum; and a fertilizer containing soluble phosphate and potash is obtained by calcining as above described a mixture of alunite and insoluble phosphate.

Classifications:

International (IPC 8-9): C05B7/00 (Advanced/Invention);

C05B7/00 (Core/Invention)

International (IPC 1-7): C05B1/02

CPC: C05B7/00

European: C05B7/00 C05B7/00+B11/14

Family:

Publication number	Publication date	Application number	Application date
GB158293 A	19210210	GB19190021220	19190828

Priority:

GB19190021220 19190828

Probable Assignee: ALEXANDER MATHESON

Assignee(s): (std): ALEXANDER MATHESON

123) Family number: 20034926 (GB705730A)

© PatBase

Title: Improvements in or relating to the manufacture of artificial fertilisers

Abstract: An artificial fertilizer is prepared by finely dividing organic and inorganic ingredients, blending them together and heating them, and injecting or projecting finely divided preheated sulphur into the heat treated mixture as it falls from the heating vessel. The organic ingredient may be humus, blood, bone or other organic body including fish. Inorganic ingredients may be rock phosphate, superphosphate, calcium carbonate and potassium compounds. Nitrogen may be added as ajonamide ammonium sulphate, or ammoniated liquor. The mixture may be heated to 65 DEG C. or over in a rotary drum, for example, for 10 minutes and discharged therefrom so as to fall into a closed hopper, as the mixture leaves the drum finely divided sulphur preheated by passage through an electrically heated orifice, is projected into the mixture to provide 2-8 per cent sulphur therein.

Classifications:

International (IPC 8-9): C05B17/00 (Advanced/Invention)

International (IPC 1-7): C05G1/00

CPC: C05B17/00

European: C05B17/00

Family:

Publication number	Publication date	Application number	Application date
GB705730 A	19540317	GB19510029131	19511212

Priority:

GB19510029131 19511212

Probable Assignee:

JOHN RAY

Assignee(s): (std):

JOHN RAY

124) Family number: 22812957 (US3053624A)

© PatBase

Title: PRODUCTION OF ORTHOPHOSPHATES OF CALCIUM

Abstract: (Claim 1) 1. An improved process for the production of a calcium orthophosphate which comprises preparing a calcium metaphosphate containing between 2 and 15 percent by weight of SiO₂ and further containing P₂O₅:CaO in a molar ratio between 0.96 and 1.2 and further containing SiO₂:CaO in a molar ratio between 0.27 and 0.53, and hydrolysing the said calcium metaphosphate to calcium orthophosphate.

Classifications:

International (IPC 8-9): C01B25/32 C01B25/38 (Advanced/Invention);
C01B25/00 (Core/Invention)

International (IPC 1-7): C01B25/32

CPC: C01B25/32 C01B25/385

European: C01B25/32 C01B25/38B

US: 423/306 423/308 423/314 71/42

Family:

Publication number	Publication date	Application number	Application date
US3053624 A	19620911	US19590811777	19590508

Priority:

US19590811777 19590508

Probable Assignee:

AFRICAN METALS CORP LTD

Assignee(s): (std):

AFRICAN METALS CORP LTD

Inventor(s): (std):

COETZEE JACOB J ; NIMROD SMIT

Inventor(s):

SMIT NIMROD

125) Family number: 44221967 (US2011089386A)

© PatBase

Title: PHASE CHANGE MATERIALS WITH IMPROVED FIRE-RETARDANT PROPERTIES

Abstract: The present invention provides latent heat storage materials having enhanced fire-retardant properties. These include compositions of magnesia cement and a phase change material in which the magnesia cement is formed from magnesium oxide, magnesium chloride, and water. The molar ratio of magnesium chloride to water may be in the range of about 1:17 to 1:32. The magnesium chloride may be dissolved in the water to give a solution having a Baume in the range between 15 degrees and 26 degrees. The molar ratio of magnesium chloride to magnesium oxide may be in the range of about 1:1 to about 1:5, and the latent heat storage material may additionally comprise fillers, and/or intumescent agents. The phase change material may be a microencapsulated formulation. A process for making these compositions is disclosed.

Classifications:

International (IPC 8-9): C04B20/10 C04B28/02 C04B28/04
C04B28/22 C04B28/32 C04B9/02 C09K21/02 C09K21/04 C09K5/06
E04B1/82 E04B1/90 E04B9/00 E04B9/04 E04C2/52

F28D20/02 (Advanced/Invention);

C04B28/00 C09K21/00 C09K5/00 E04B1/82 E04B9/00

E04B9/04 (Core/Invention)

CPC: F28D20/023 F28D20/0008 F28D20/021 E04C2/525

F28D20/025 C04B9/02 C04B28/04 C04B2103/0071 E04B1/90

E04B2001/748 E04B2001/8414 E04B2001/8428 E04B2001/8433

F28D20/02 E04B2001/8442 E04B9/0442 E04B9/0464 E04B9/0485 C04B28/18 Y02E60/145 Y02W30/92 Y02W30/97

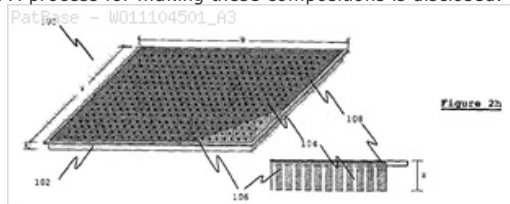
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C04B28/182 C04B28/184 C04B28/186 C04B28/188

European: C04B20/10 C04B28/04 C04B28/22 C04B28/32 C04B9/02 C09K21/02 C09K5/06B M04B103/00W2 M04B111/28

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US: 252/602 252/602P

**Family:**

Publication number	Publication date	Application number	Application date
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GB2466391 B2	20101020	GB20100001539	20091015
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GB2467886 B2	20110209	GB20100010853	20100628
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WO11104501 A2	20110901	WO2011GB00245	20110223
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Priority:

GB20090018061	20091015	GB20100001539	20091015	GB20100001541	20091015
GB20090019406	20091105	GB20100002873	20100219	GB20100003004	20100223
GB20100006127	20100413	GB20100006119	20100413	GB20100008025	20100514
GB20100008191	20100517	GB20100010853	20100628	GB20100011530	20100708
GB20100015418	20100915	GB20100017444	20101015	WO2010GB01917	20101015

Probable Assignee: BERRY MICHAEL T

Assignee(s): (std): BERRY MICHAEL T ; BERRY MICHAEL TREVOR ; SCANLON JANET S ; SCANLON JANET SUSAN

Assignee(s): JANET SUSAN SCANLON ; MICHAEL TREVOR BERRY

Inventor(s): (std): SCANLON JANET SUSAN ; BERRY MICHAEL TREVOR

Inventor(s): MICHAEL TREVOR BERRY ; JANET SUSAN SCANLON

Agent(s): PROBERT GARETH DAVID; COATES IAN HAROLD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

126) Family number: 43953977 (US2009272230A)

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Title: RECOVERY OF RARE EARTH ELEMENTS

Abstract: A process for recovering rare earth elements from a composite ore containing rare earth elements that includes a monazite group mineral and an apatite mineral, includes pre-leaching the composite ore with an acid so as to substantially dissolve the apatite mineral into the leach liquor and precipitating rare earth elements from the pre-leach liquor. The residue of the pre-leaching step is subjected to an acid bake treatment, followed by a water leach, to produce a water leach liquor rich in rare earth elements. Impurities including thorium and iron are separated from the water leach liquor by introducing a neutralizing additive to the water leach liquor rich in rare earth elements, and rare earth elements are precipitated from the post-neutralization liquor.

Classifications:

International (IPC 8-9): C01F17/00 C22B3/04 C22B3/06 C22B3/10 C22B3/20 C22B3/44 C22B59/00 (Advanced/Invention); C22B3/00 C22B59/00 (Core/Invention)

CPC: C22B59/00 C22B1/11 C22B3/06 C22B3/44 Y02P10/234

European: C22B1/11 C22B3/06 C22B3/44 C22B59/00

US: 423/150.1 423/20 423/21.1 423/21.5 423/263 75/739 75/739P 75/743 75/743S

Family:

Publication number	Publication date	Application number	Application date
AU2008201945 AA	20091119	AU20080201945	20080502
AU2008201945 BB	20140306	AU20080201945	20080502
CA2631190 AA	20091102	CA20082631190	20080513
CA2631190 C	20150929	CA20082631190	20080513
US2009272230 AA	20091105	US20080119964	20080513
US7993612 BB	20110809	US20080119964	20080513

Priority:

AU20080201945 20080502

Probable Assignee: ARAFURA RESOURCES LTD

Assignee(s): (std): ARAFURA RESOURCES LTD

Assignee(s): HO ELIZABETH MARGARET ; MACKOWSKI STEVEN JOHN ; RAITER RAUL ; SOLDENHOFF KARIN HELENE ; ARAFURA RESOURCES LIMITED

Inventor(s): (std): HO ELIZABETH MARGARET ; RAITER RAUL ; SOLDENHOFF KARIN HELENE ; MACKOWSKI STEVEN JOHN ; SOLDENHOFF KAREN ; HO ELIZABETH

Inventor(s): RAUL RAITER ; ELIZABETH HO ; KAREN SOLDENHOFF ; STEVEN JOHN MACKOWSKI

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOWAN INTELLECTUAL PROPERTY; RIDOUT AND MAYBEE LLP; HARNESS DICKEY AND PIERCE PLC

127) Family number: 19104987 (GB559482A)

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Title: Improvements relating to the manufacture of granular superphosphatic fertilisers

Abstract: 559,482. Mixing-appliances. STURTEVANT ENGINEERING CO., Ltd., RICHARDSON and CO. (YORK)., Ltd., H. PROCTOR, J. T., and OGILVIE. A. June 9, 1942, Nos. 7869/42 and 1017/43. [Class 86] [Also in Group III] Granular calcium

superphosphate is produced by a continuous process in which ground phosphate rock and sulphuric acid are intimately mixed and retained in a mixer until a superphosphate slurry is produced, the slurry then being continuously delivered into a rotating granulator, open to atmosphere, in which granules are formed and from which they are continuously delivered to a rotary dryer wherein they are retained until hardened and from which they are passed continuously to a grading separator. The process is conducted in an apparatus comprising a mixer in which the reaction occurs and into which is delivered ground phosphate from a hopper 2 and acid from a metering device. The reacted mixture passes to a granulator 10, open to the atmosphere, which may be of the type described in Specification 544,274, [Group III]. The granules pass down a shoot 13 into a dryer 14 and thence to a screen 18 of say 1 inch mesh. The large granules pass to a mill, while those which pass the mesh are carried up by a conveyer 20 to a grading screen 23. the coarser granules pass down a shoot 27 to the grinding mill, the desired grade to a conveyer 25 for bagging, and the fines to a conveyer 28a to be returned to the granulator. The mixing reactor may be as shown in Fig. 5. comprising shaft stripper arms 4 and paddles 5 of opposite inclinations but arranged to cause a slow advance of the material. Specification 491,841, [Group III], also is referred to.

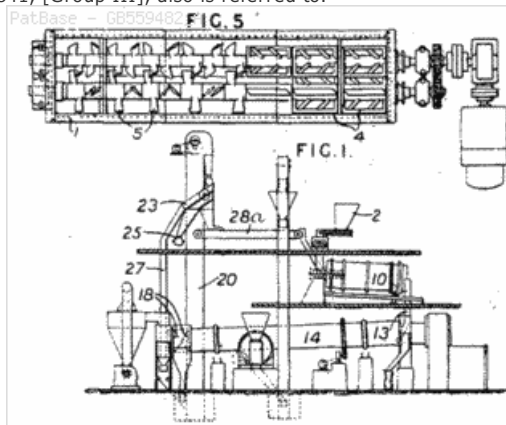
Classifications:

International (IPC 8-9): C05B1/02 (Advanced/Invention)

International (IPC 1-7): C05B19/02

CPC: C05B1/02

European: C05B1/02



Family:

Publication number	Publication date	Application number	Application date
GB559482 A	19440222	GB19420007869	19420609

Priority:

GB19420007869 19420609

Probable Assignee: HY RICHARDSON AND CO YORK LTD

Assignee(s): (std): ALEXANDER OGILVIE ; HY RICHARDSON AND CO YORK LTD ; JOHN TYNDALE PROCTER ; STURTEVANT ENG CO LTD

Assignee(s): STURTEVANT ENGINEERING COMPANY LIMITED ; HY RICHARDSON AND CO YORK LIMITED

128) Family number: 18267994 (GB258144A)

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Title: An improved manufacture of phosphatic fertilisers

Abstract: Phosphates.-A fertilizer is manufactured from a phosphate-containing material by mixing a natural phosphate with at least 25 per cent by weight of an alkine earth carbonate and heating rapidly in an oxidizing atmosphere to temperatures approximately between 1000 C.-1600 C. An oxide of iron may be added to the mixture to reduce the temperature of the reaction. The heating can be effected directly or indirectly in a furnace of the stationary or rotary type.

Classifications:

International (IPC 8-9): C05B13/02 (Advanced/Invention);

C05B13/00 (Core/Invention)

International (IPC 1-7): C05B13/02

CPC: C05B13/02

European: C05B13/02

Family:

Publication number	Publication date	Application number	Application date
GB258144 A	19260916	GB19260000814	19260111

Priority:

GB19260000814 19260111

Probable Assignee: EYSTEIN TORKILDSEN

Assignee(s): (std): EYSTEIN TORKILDSEN ; OLAF ROVERUD OLSEN

129) Family number: 14273997 (FR2757504A)

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Title: PREPARATION OF ORGANO-MINERAL FERTILISERS

Abstract: Preparation of organo-mineral fertiliser comprises preparing the first mixture of mineral constituents (1,3), preparing the second mixture of organic constituents (7,9) and mixing the two compositions to a paste in a mixer (13) followed by: (a) granulating the paste; (b) baking (19) the granules (17) without destroying the organic elements, and recovering the vapour, cooling to liquefy and returning to the mixer (13); and (c) cooling the baked granules rapidly. Also claimed is the fertiliser prepared as above containing 5-50 percent organic elements.

Classifications:

International (IPC 8-9): B01J2/00 B01J2/14 C05G1/00

C05G3/00 (Advanced/Invention);

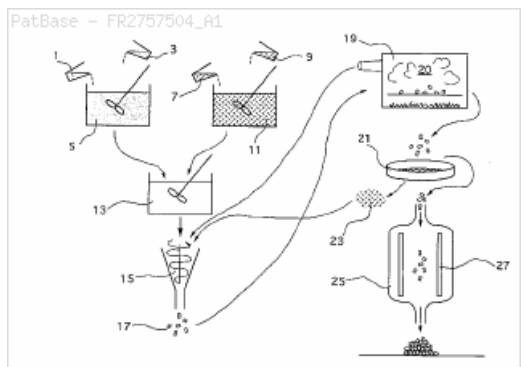
B01J2/00 B01J2/14 C05G1/00 C05G3/00 (Core/Invention)

International (IPC 1-7): B01F3/18 B01J2/00 C05B17/00 C05C3/00

C05D1/00 C05D3/00 C05D5/00 C05F11/02 C05F7/00 C05G1/00

CPC: B01J2/00 B01J2/14 C05G1/00 C05G3/0058

European: B01J2/00 B01J2/14 C05G1/00 C05G3/00B8



Family:

Publication number	Publication date	Application number	Application date
FR2757504 A1	19980626	FR19960016161	19961223

Priority:

FR19960016161 19961223

Probable Assignee:

EUROP D ENGRAIS

Assignee(s): (std):

EUROP D ENGRAIS

Assignee(s):

EUROPEENNE D ENGRAIS

Inventor(s): (std):

JOURDAIN DOMINIQUE