Title (en)

SULPHUR FERTILIZER AND GRANULATED SULPHUR FERTILIZER MANUFACTURING METHOD

Title (de)

SCHWEFELDÜNGER UND VERFAHREN ZUR HERSTELLUNG VON GRANULATFÖRMIGEM SCHWEFELDÜNGER

Title (fr)

ENGRAIS SOUFRÉ ET PROCÉDÉ DE FABRICATION D'ENGRAIS SOUFRÉ EN GRANULÉS

Publication

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Application

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Priority

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- PL 38049006 A 20060825

Abstract (en)

[origin: WO2008024007A2] The invention covers sulphur fertilizer, in form of globular granules or pellets constituting solidified mixture of liquid sulphur, bentonite and lignosulfonates, and alternatively fertilizing additives. In its solidified mixture, the fertilizer contains 60-95% of sulphur, 4-20% of sodium or calcium bentonite, and 1-8% of calcium or sodium lignosulfonate. According to the invention, the method applied to produce granulated sulphur fertilizer is characterised by the following: the mixture of liquid sulphur with bentonite and alternatively with lignosulfonate or fertilizing additives is splashed in the granulator at the temperature of 120-150° C to form micro-drops, onto a curtain made by falling granules. Then, micro-drops are solidified layer by layer on surfaces of falling granules at the temperature of 90-115° C in a stream of air flowing through the curtain. At the same time, additional coolant is sprayed to cool the air. Granules and worn out coolant with air and dust are removed from the process in separate streams, while granules leaving the process are kept at the temperature of 40-90° C, and subgrain returned to the process favourably cools down to the temperature under 30° C.

IPC 8 full level

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