

Title (en)
METHOD FOR METERING A MIXTURE OF LIQUID AMMONIA AND AN ADDITIVE INTO A SOLID AND CORRESPONDING METERING DEVICE

Title (de)
VERFAHREN ZUR DOSIERUNG EINES GEMISCHES AUS FLÜSSIGEM AMMONIAK UND EINEM ZUSATZSTOFF IN EINEN FESTSTOFF UND DOSIERVORRICHTUNG

Title (fr)
PROCEDE DE DOSAGE D'UN MELANGE CONSTITUE D'UN AMMONIAC LIQUIDE ET D'UN ADDITIF AMENE A UN SOLIDE, ET DISPOSITIF DE DOSAGE

Publication
EP 1071719 A1 20010131 (DE)

Application
EP 99914489 A 19990308

Priority
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• EP 9901483 W 19990308

Abstract (en)
[origin: DE19810740A1] A semi-continuous process for reacting a solid polysaccharide material, e.g. cellulose, with an additive compound such as urea in anhydrous liquid ammonia medium. The solid polysaccharide is charged to a high pressure reactor (32) to which is then added a solution of urea in liquid ammonia, via a high pressure pump (22) from a first charge make-up vessel (14). The reactor is sealed by closing inlet and outlet valves (41, 42) and either explosively initiated or impulse pressurized to 25-30 bar; the pressure is released, the reactor discharged, recharged with cellulose, and re-dosed with ammonia/additive solution from a second charge-make-up vessel (16). The make-up, charging, pressurizing, and discharging operations can be repetitively performed, under computer control, on an approximate 2 minute cycle, with the preparation of the additive solution alternating between two or more vessels. An Independent claim is included for the plant for operation of the process, having at least, two storage, weigh vessels (10, 12) for liquid or solid additive materials, two heated make-up pressure vessels (14, 16), high pressure transfer pumps (22) suitable for ammonia, a reactor vessel (32) , plus interconnecting valves and pipework, and a control system.

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C08B 1/00; B27K 5/00

IPC 8 full level
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