

Title (en)

BLACK LIQUOR GASIFICATION PROCESS AND REGENERATION OF PULPING LIQUOR

Title (de)

VERFAHREN ZUM VERGASEN VON SCHWARZLAUGE UND REGENERIERUNG VON AUFSCHLUSSFLÜSSIGKEIT

Title (fr)

PROCEDE DE GAZEIFICATION DE LIQUEUR NOIRE ET REGENERATION DE LA LIQUEUR DE REDUCTION EN PATE

Publication

EP 0868563 A1 19981007 (EN)

Application

EP 96942830 A 19961129

Priority

- US 9619091 W 19961129
- US 57785095 A 19951222

Abstract (en)

[origin: WO9723687A1] The black liquor (10) from a kraft pulping process is gasified in a fluidized bed reactor (12) in the presence of solid calcium compounds (CaO, CaCO₃, Ca(OH)₂) which react with the sulfur compounds (H₂S, COS) to produce solid CaS. The solid CaS along with the other primary solids (Na₂CO₃, Na₂S) are removed (18) from the reactor (12) and processed to form one or more white liquor streams for recycle to the pulping process. In this processing, the Na₂CO₃ and Na₂S are dissolved (72) to form green liquor and the CaS is reacted (78) with NaOH to form NaHS. The causticizing of the green liquor may be separate from or combined with the conversion of the CaS in the green liquor to form a single white liquor stream (104) or the CaS may be separated from the green liquor and processed entirely separately to form a second high sulfide white liquor stream (174).

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D21C 11/12; **D21C 11/00**

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