

Title (en)  
SULFITE MODIFIED CONTINUOUS DIGESTING

Publication  
**EP 0471154 A3 19930609 (EN)**

Application  
**EP 91108240 A 19910522**

Priority  
US 56914290 A 19900817

Abstract (en)  
[origin: EP0471154A2] In the production of paper pulp by the sulfite pulping process, the amount of sulfite cooking chemical consumed per ton of pulp produced is significantly lowered, a much lower K-No. can be achieved without screen plugging, the wash circulation temperature is lowered, and the digester (19) runs better, in the practice of the invention. According to the invention, the wood chips entrained in sulfite cooking liquor are fed into the top of a digester, and flow co-currently to a central portion (21) of the digester, at which portion waste liquor is extracted and passed to flash tanks (25). An effective amount of the sulfite cooking liquor (preferably about 5-20%) utilized for producing the pulp is introduced into the vessel in the wash circulation (36), adjacent the bottom of the digester, to flow countercurrently to the material moving downwardly in the vessel. The produced sulfite pulp is withdrawn (at 33) from the bottom of the digester. The invention is primarily applicable to acid or bisulfite pulping, but also can be utilized with alkaline or neutral sulfite pulping. In some circumstances the entire cooking flow can be countercurrent (e.g. 5% up to close to 100% of the sulfite cooking liquor flows countercurrently to the material). <IMAGE>

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CPC (source: EP)  
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Citation (search report)

- [A] US 3427218 A 19690211 - RICHTER JOHAN C F C
- [A] US 3215588 A 19651102 - KLEINERT THEODOR N
- [AP] EP 0407370 A2 19910109 - KAMYR AB [SE]

Cited by  
WO2011063800A2; DE102009057208A1

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