

Title (en)
Process for milling a fibrous material

Title (de)
Verfahren zur Mahlung eines Faserstoffes

Title (fr)
Procédé de broyage d' une matière fibreuse

Publication
EP 1209282 A1 20020529 (DE)

Application
EP 01124186 A 20011011

Priority
DE 10057682 A 20001121

Abstract (en)
[origin: DE10057682A1] To even out the characteristics of a suspended paper fiber material (1), using a controlled wet grinding (6), the suspended paper fibers are initially separated into fractions by a wet sieve (5) according to size and/or shape and/or flexibility. The amount of solid matter in the overflow (3) is determined, and the overflow is linked to the wet grinder on an increase in the solid content and, on a reduced solid content the overflow is lowered. To smooth out the characteristics of suspended paper fibers, the solid mater in the overflow is measured by density at a constant volume flow. The specific grinding action is proportional to the measured solid content at the overflow. The wet grinder is a perfecting mill, with its capacity set by positioning the grinding units to the grinding effort. It can also be set by a shift in the rotary speed at the same drive torque, so that the specific edge loading is constant. The material density is measured at the overflow, and then controlled by the addition of water on a time constant value. The wet sieve action is in a closed pressure sorter, so that the sieve separates the paper fiber suspension into fractions, so that the stiff and longer fibers and chips pass through the overflow and the more flexible and shorter fibers pass through.

Abstract (de)
Das Verfahren dient zur Vergleichmäßigung der Eigenschaften von suspendierten Papierfasern mit Hilfe einer Nassmahlung (6). Erfindungsgemäß wird der suspendierte Papierfaserstoff (1) zunächst in einer Nasssiebung (5) fraktioniert und die Feststoffmenge des dabei in den Überlauf (3) gelangten Stoffes ermittelt. Bei der sich anschließenden Nassmahlung (6) des Überlaufes (3) wird die spezifische Mahlarbeit entsprechend der ermittelten Feststoffmenge des Überlaufes erhöht, bzw. abgesenkt. <IMAGE>

IPC 1-7
D21D 1/00; **D21D 1/20**; **D21D 5/02**

IPC 8 full level
D21D 1/00 (2006.01); **D21D 1/20** (2006.01); **D21D 5/02** (2006.01)

CPC (source: EP)
D21D 1/002 (2013.01); **D21D 1/20** (2013.01); **D21D 5/02** (2013.01)

Citation (search report)

- [A] US 3604646 A 19710914 - KEYES MARION A, et al
- [A] WO 0031335 A1 20000602 - VALMET FIBERTECH AB [SE], et al
- [A] US 4562969 A 19860107 - LINDAHL JONAS A I [SE]
- [A] DE 19808355 A1 19990902 - VOITH SULZER PAPIERTECH PATENT [DE]

Cited by
WO2008087107A1

Designated contracting state (EPC)
AT DE FI

DOCDB simple family (publication)
EP 1209282 A1 20020529; **EP 1209282 B1 20060503**; AT E325223 T1 20060615; DE 10057682 A1 20020523; DE 50109684 D1 20060608

DOCDB simple family (application)
EP 01124186 A 20011011; AT 01124186 T 20011011; DE 10057682 A 20001121; DE 50109684 T 20011011