Title (en)

IMPROVED PULPER ROTOR AND ASSEMBLY

VERBESSERTER PULPERROTOR UND MONTAGE

Title (fr)

ROTOR TRITURATEUR AMELIORE, ET ENSEMBLE

Publication

EP 1594597 A4 20070307 (EN)

Application

EP 04701760 A 20040113

Priority

- US 2004000791 W 20040113
- US 44053203 P 20030116

Abstract (en)

[origin: WO2004064991A2] An improved pulper, mixer or defibering, rotor having a spar ring attached to a hub of the rotor with a series of curved vanes projecting from the spar ring. The curved vanes have a vane face and a trailing edge. The trailing edge may be unitary and integral with the vane, or may be segmented in combination with trailing edge portion provided on an underlying spar stub to which the vanes are attached. The hydrodynamic suction created by the trailing edge is enhanced by the addition of a dam at the vane tip end of the trailing edge zone. The vanes have a constant vane face angle relative to radians extending outward from the hub of the rotor. As a result of the constant vane face angle the pulp, or other materials, mixed by the vanes during rotation of the rotor are more consistently in contact with the vanes during rotation of the rotor. The vanes are also streamlined to reduce hydrodynamic drag especially at the vane tips where speed and therefore drag potential are at their highest levels. As a result, increased circulation and pumping effects with minimal power requirements are achieved. The vanes may be made of high wear resistant materials and are easily accessible for maintenance, repair or replacement.

IPC 8 full level

B01F 1/00 (2006.01); B02C 23/36 (2006.01); D21B 1/34 (2006.01)

IPC 8 main group level **B01F** (2006.01)

CPC (source: EP)

D21B 1/347 (2013.01)

Citation (search report)

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US8201990B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004064991 A2 20040805; WO 2004064991 A3 20050728; CA 2513609 A1 20040805; EP 1594597 A2 20051116; EP 1594597 A4 20070307

DOCDB simple family (application)

US 2004000791 W 20040113; CA 2513609 A 20040113; EP 04701760 A 20040113