

Title (en)  
COMBINED TANGENTIAL SHEAR HOMOGENIZING AND FLASHING APPARATUS HAVING A NON-UNIFORM ROTOR/STATOR GAP DIMENSION AND A PARAMETER RESPONSIVE TO A VARIABLE ROTOR/STATOR GAP DIMENSION

Title (de)  
KOMBINIERTE TANGENTIALE SCHERHOMOGENISIERUNGS- UND BLINKVORRICHTUNG MIT UNEINHEITLICHER ROTOR-/STATORSPALTDIMENSION UND ANSPRECHENDER PARAMETER AUF EINE VARIABLE ROTOR-/STATORSPALTDIMENSION

Title (fr)  
APPAREIL À COMBINAISON D'ÉVAPORATION ET D'HOMOGÉNÉISATION PAR CONTRAINTE TANGENTIELLE AYANT UNE DIMENSION D'INTERVALLE ROTOR/STATOR NON UNIFORME ET UN PARAMÈTRE SENSIBLE À UNE DIMENSION D'INTERVALLE DE ROTOR/STATOR VARIABLE

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Application  
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- US 201261724594 P 20121109
- US 201261724598 P 20121109
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Abstract (en)  
[origin: WO2014074530A1] A combined tangential shear homogenizing and flashing apparatus for destructuring pretreated biomass comprises a housing connectable to a source of pressurized pretreated biomass, and a stator and a rotor mounted within the housing. The stator and rotor being confrontationally disposed and spaced apart by a predetermined uniformly dimensioned axial gap. In use, rotational movement of the rotor with respect to the stator imparts a tangential shear to a volume of pretreated biomass. The tangential shear homogenizes the volume of pretreated biomass while a pressure difference causes a partial phase separation of the homogenized biomass into vapor and liquid phases such that the pretreated biomass undergoes at least a three-fold total volumetric increase and a weight transition to a vapor of at least one percent (1%).

IPC 8 full level  
**C12M 1/33** (2006.01); **B01F 7/00** (2006.01); **C08H 8/00** (2010.01); **C12M 1/00** (2006.01); **C13K 1/02** (2006.01)

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Citation (search report)  
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