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**van Heiningen et al.**

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(54) **PRE-EXTRACTION AND SOLVENT PULPING OF LIGNOCELLULOSIC MATERIAL**

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(75) Inventors: **Adriaan Reinhard Pieter van Heiningen**, Orono, ME (US);  
**Sung-Hoon Yoon**, Auburn, AL (US);  
**Haixuan Zou**, Orono, ME (US); **Jianer Jiang**, Mason, OH (US); **Gopal C. Goyal**, Mason, OH (US)

(73) Assignees: **The University of Maine System Board of Trustees**, Bangor, ME (US);  
**International Paper**, Memphis, TN (US)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **12/005,432**

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**Related U.S. Application Data**

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*Primary Examiner*—Eric Hug  
*Assistant Examiner*—Anthony J Calandra  
(74) *Attorney, Agent, or Firm*—MacMillan, Sobanski & Todd, LLC

(51) **Int. Cl.**

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(57) **ABSTRACT**

(52) **U.S. Cl.** ..... **162/43; 162/9; 162/17; 162/41; 162/72**

(58) **Field of Classification Search** ..... **162/9, 162/17, 41, 72; 435/72**

See application file for complete search history.

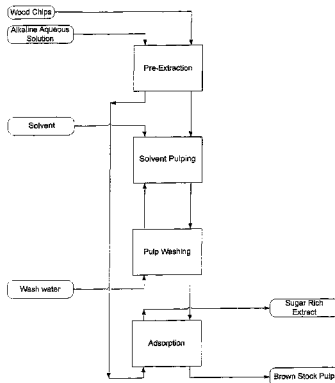
A process of treating a lignocellulosic material includes a pre-extraction step in which hemicellulose is extracted from the lignocellulosic material. Then, in a solvent pulping step, the lignocellulosic material is separated into pulp by contacting the lignocellulosic material with a cooking liquor comprising a solvent. In one embodiment, the solvent has a boiling point of at least about 150° C. In another embodiment, the cooking liquor comprises a mixture of solvent and water.

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**22 Claims, 1 Drawing Sheet**



Pulping Process Including Pre-Extraction and Solvent Pulping Steps