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(54) **SYSTEM AND METHOD FOR
CONDITIONING A HARDWOOD PULP
LIQUID HYDROLYSATE**

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CPC **D21C 11/0007** (2013.01); **C13K 1/02**
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11/10; **C13K 1/02**; **C13K 13/00**
See application file for complete search history.

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(57) **ABSTRACT**

A system and method for hardwood pulp liquid hydrolysate conditioning includes a first evaporator receives a hardwood mix extract and outputting a quantity of vapor and extract. A hydrolysis unit receives the extract, hydrolyzes and outputs to a lignin separation device, which separates and recovers a quantity of lignin. A neutralization device receives extract from the lignin separation device and a neutralizing agent, producing a mixture of solid precipitate and a fifth extract. The solid precipitate is removed from the fifth extract. A second evaporator removes a quantity of acid from the fifth extract in a vapor form. This vapor may be recycled to improve total acid recovery or discarded. A desalination device receives the diluted extract, separates out some of the acid and salt and outputs a desalinated solution.

15 Claims, 3 Drawing Sheets

