

Title (en)

PROCESS FOR THE RECOVERY AND RECYCLE OF CHEMICALS IN A REGENERATED CELLULOSE FIBER PROCESS

Title (de)

VERFAHREN ZUR RÜCKGEWINNUNG UND WIEDERVERWENDUNG VON CHEMIKALIEN IN EINEM VERFAHREN MIT REGENERIERTER CELLULOSEFASER

Title (fr)

PROCÉDÉ DE RÉCUPÉRATION ET DE RECYCLAGE DE PRODUITS CHIMIQUES DANS UN PROCÉDÉ DE FIBRE DE CELLULOSE RÉGÉNÉRÉE

Publication

**EP 4136282 A1 20230222 (EN)**

Application

**EP 21789259 A 20210416**

Priority

- SE 2050437 A 20200417
- SE 2021050349 W 20210416

Abstract (en)

[origin: WO2021211046A1] The present invention relates to a process for the recovery and recycle of spinning chemicals for spinning regenerated cellulosic fibers using alkaline cellulose solvents for dissolution of cellulose, said process being characterized by that spinning and/or fiber washing chemicals are treated by electrolysis of sodium sulfate therein, forming one stream comprising sodium hydroxide and one stream comprising sulfuric acid, and wherein at least part of the formed sodium hydroxide is used for pre-treatment of cellulose for adjustment of intrinsic viscosity of the cellulose, and/or as an aid in removal of hemicellulose from cellulose and/or for dissolving cellulose in a sodium hydroxide solvent, and/or wherein at least part of the formed sulfuric acid is used in one or more steps of the fiber washing, and/or in the cellulose spinning and/or for fiber regeneration.

IPC 8 full level

**D01F 13/02** (2006.01); **B01D 61/42** (2006.01); **C25B 1/16** (2006.01); **C25B 1/22** (2006.01); **D01F 2/02** (2006.01)

CPC (source: EP US)

**B01D 61/422** (2013.01 - US); **C01D 5/006** (2013.01 - EP); **C25B 1/16** (2013.01 - EP); **C25B 1/22** (2013.01 - EP); **C25B 9/21** (2021.01 - EP); **C25B 15/081** (2021.01 - EP); **D01F 2/02** (2013.01 - EP); **D01F 13/02** (2013.01 - EP); **B01D 61/422** (2013.01 - EP); **Y02P 70/62** (2015.11 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2021211046 A1 20211021; EP 4136282 A1 20230222**

DOCDB simple family (application)

**SE 2021050349 W 20210416; EP 21789259 A 20210416**