

Title (en)  
A BLEACHING PROCESS

Title (de)  
BLEICHVERFAHREN

Title (fr)  
PROCESSUS DE BLANCHIMENT

Publication  
**EP 4230791 A1 20230823 (EN)**

Application  
**EP 22157484 A 20220218**

Priority  
EP 22157484 A 20220218

Abstract (en)  
A bleaching process of pulp is disclosed comprising performing a delignification of the pulp by carrying out in a following sequence: an enzymatic treatment step comprising contacting the pulp with a glycoside hydrolase family GH11 xylanase enzyme at a pH of at least 9.5 and a temperature of at least 85 °C, an oxidation step wherein a bleaching agent is added, an alkaline extraction step wherein an alkaline agent is added, and recovering bleached pulp, wherein the GH11 xylanase enzyme has an ability to cause at least 20 % reduction in viscosity of a xylan-containing mixture at 90°C and pH 10.5, compared to the same mixture without any xylanase enzyme.

IPC 8 full level  
**D21C 5/00** (2006.01); **D21C 9/10** (2006.01); **D21C 9/147** (2006.01); **D21C 9/153** (2006.01); **D21C 9/16** (2006.01); **D21H 17/00** (2006.01)

CPC (source: EP)  
**D21C 5/005** (2013.01); **D21C 9/10** (2013.01); **D21C 9/147** (2013.01); **D21C 9/153** (2013.01); **D21C 9/16** (2013.01); **D21H 17/005** (2013.01)

Citation (applicant)  
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• [A] "Sustainable Degradation of Lignocellulosic Biomass - Techniques, Applications and Commercialization", 15 May 2013, INTECH, ISBN: 978-9-53-511119-1, article F. L. ET AL: "A Review of Xylanase Production by the Fermentation of Xylan: Classification, Characterization and Applications", XP055185297, DOI: 10.5772/53544

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

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DOCDB simple family (application)  
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