

Title (en)  
COOKING APPARATUS AND PROCESS FOR TREATING BIOMASS CONTAINING LIGNOCELLULOSE

Title (de)  
GÄRGERÄT UND VERFAHREN ZUR BEHANDLUNG VON LIGNOCELLULOSEHALTIGER BIOMASSE

Title (fr)  
APPAREIL DE CUISSON ET PROCÉDÉ DE TRAITEMENT DE BIOMASSE CONTENANT DE LA LIGNOCELLULOSE

Publication  
**EP 3851576 A1 20210721 (EN)**

Application  
**EP 21151129 A 20210112**

Priority  
FI 20205036 A 20200115

Abstract (en)  
A cooking apparatus for treating biomass containing lignocellulose, comprises one or more cooking reactors (100, 100') adapted to cook biomass in a cooking chemical which includes formic acid and acetic acid. A heating arrangement (106) is adapted to adjust heat energy transfer to each cooking reactor (100, 100') by adjusting the temperature of the cooking chemical as a function of time and by feeding the temperature-adjusted cooking chemical into each cooking reactor (100, 100').

IPC 8 full level  
**D21C 1/04** (2006.01); **D21C 3/04** (2006.01); **D21C 3/22** (2006.01); **D21C 5/00** (2006.01); **D21C 7/06** (2006.01); **D21C 7/14** (2006.01)

CPC (source: EP FI RU)  
**D21C 1/04** (2013.01 - EP RU); **D21C 3/04** (2013.01 - EP RU); **D21C 3/20** (2013.01 - FI); **D21C 3/222** (2013.01 - EP RU); **D21C 5/00** (2013.01 - EP); **D21C 7/06** (2013.01 - EP); **D21C 7/10** (2013.01 - FI); **D21C 7/14** (2013.01 - EP)

Citation (search report)

- [X] US 2013062031 A1 20130314 - KALLMES ANDREW [US]
- [X] EP 2390409 A1 20111130 - CHEMPOLIS OY [FI]
- [X] WO 02053829 A1 20020711 - CHEMPOLIS OY [FI], et al
- [X] WO 03006737 A1 20030123 - CHEMPOLIS OY [FI], et al
- [A] US 3607620 A 19710921 - CARLSMITH LAWRENCE A
- [A] WO 2013135965 A1 20130919 - CHEMPOLIS OY [FI]
- [A] EP 0477059 A2 19920325 - KAMYR AB [SE]

Cited by  
WO2023111009A1

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

DOCDB simple family (publication)  
**EP 3851576 A1 20210721**; FI 129440 B 20220228; FI 20205036 A1 20210716; FI 20205036 A 20210716; RU 2769389 C1 20220331

DOCDB simple family (application)  
**EP 21151129 A 20210112**; FI 20205036 A 20200115; RU 2021100506 A 20210113