

General:

- Id of document version: **4242931**
- Status of the document <ep-bulletin>: **Replacement of data for an application already published**
- Changed tag from previous publication of document <B002EP><ep-chgt-info>: **B475=N,20140502**
- Publication number of the document (EPO or WIPO) <B110>: **2376642**
- Kind of document <B130>: **B1**
- EPO Application number <B210>: **09774846.1**
- Application filing date <B220>: **2009.12.16**
- Date of refusal of application <B235>:
- Date of withdrawal of application <B235>:
- Date of application deemed withdrawn <B237>:
- Date of receipt of request for re-establishment of rights <B238EP>:
- Date of decision for re-establishment of rights <B238>:
- Date of making available to the public by printing or similar process of an unexamined patent document, on which no grant has taken place on or before the said date <B430>: **2011.10.19**
- Date of making available to the public by printing or similar process of a patent document on which grant has taken place on or before the said date <B450><date>: **2013.12.11**
- Number of the EPO Bulletin in which the mention of the grant is published. <B450><bnun>: **201350**
- Date of rejection of the opposition procedure <B787>:
- Date of termination of the opposition procedure <B788>:
- Due date for translation: **2014.03.11**
- Text when the inventor has agreed to waive his entitlement to designation. <B009EP><text[jj]>:
- Date of reception of document: **2014.06.06**
- Date of publication <B140>: **2014.06.04**

Priority <B300>:

Number(s) assigned to priority application(s) <B310>:	Date(s) of filing of priority application(s) <B320>:	National property office allotting the priority application number or the organization allotting the regional priority application Number (WO for PCT) – country code <B330>:
	2008.12.17	EP
	2008.12.17	US
	2009.10.22	EP

Lapse <B472>:

No lapse.

Classification <B500>:

IPC (8) as one fixed length field of 50 positions <B510EP><text>:	Edition of IPC (IPC version) <B516>:
C12P 5/00 20060101AFI20100727BHEP	8
C12P 7/00 20060101ALI20100727BHEP	8
C12P 7/08 20060101ALI20100727BHEP	8
C12P 7/12 20060101ALI20100727BHEP	8

Title <B540>:

No title.

Division <B620> or <B620EP>:

No division.

EPO Customer <B710>&<B720>&<B730>&<B740>:

Name <snm>:	Borregaard AS	EPO number of the customer <iid>:	101313597
Address <street>, <city>, <ctry>:	Hjalmar Wessels vei 10 1721 Sarpsborg NO		
Customer type:	Grantees	Status:	0

Name <snm>:	FRÖLANDER, Anders	EPO number of the customer <iid>:	
Address <street>, <city>, <ctry>:	c/o Borregaard Industries LimitedNorgeHjalmar Wesselsv. 10 N-1721 Sarpsborg NO		
Customer type:	Inventor	Status:	0

Name <snm>:	LERSCH, Martin	EPO number of the customer <iid>:	
Address <street>, <city>, <ctry>:	c/o Borregaard Industries LimitedNorgeHjalmar Wesselsv. 10 N-1721 Sarpsborg NO		
Customer type:	Inventor	Status:	0

Name <snm>:	RØDSRUD, Gudbrand	EPO number of the customer <iid>:	
Address <street>, <city>, <ctry>:	c/o Borregaard Industries LimitedNorgeHjalmar Wesselsv. 10 N-1721 Sarpsborg NO		
Customer type:	Inventor	Status:	0

Name <snm>:	SJÖDE, Anders	EPO number of the customer <iid>:	
Address <street>, <city>, <ctry>:	c/o Borregaard Industries LimitedNorgeHjalmar Wesselsv. 10 N-1721 Sarpsborg NO		
Customer type:	Inventor	Status:	0

Name <snm>:	Tostmann, Holger Carl	EPO number of the customer <iid>:	100994207
Address <street>, <city>, <ctry>:	Wallinger Ricker Schlotter Tostmann Patent- und Rechtsanwälte Zweibrückenstrasse 5-7 80331 München DE		
Customer type:	Attorney / Agent	Status:	0

Opposition <B780>:
No opposition.

Designated countries <B840>:

Kind of document <B130>:	Date of publication <B140>:	Country code <B840><ctry>:
B1	2014.06.04	NO

PCT <B860>&<B870>:

Kind of document <B130>:	B1		
PCT Application number <B861><anum>:	EP2009009046	Date of filing <B861><date>:	2009.12.16
PCT Publication number <B871><pnum>:	WO2010078930	Publication date <B871><date>:	2010.07.15
Issue number of the Gazette <B871><bnum>:	201028	Country code <B862>:	en

Citations <B560>:

Kind of document <B130>:	Type <B561> or <B562>:	Text <B561><text> or <B562><text>:
B1	PT citation	BR-A- 9 706 078
B1	PT citation	SE-C- 527 646
B1	PT citation	US-A1- 2009 298 149
B1	Non PT citation	Perkins (Chair): "AIChE - The 2008 Annual Meeting, Philadelphia, USA / Topical 4: Sustainable biorefineries (T4)", Google, 19 November 2008 (2008-11-19), pages 1-2, XP002616372, Retrieved from the Internet: URL:aiche.confex.com/aiche/2008/te m/S5427.HTM [retrieved on 2011-01-12]

B1	Non PT citation	Zhu: "AIChE - The 2008 Annual Meeting, Philadelphia, USA / Sporl for robust enzymatic hydrolysis of woody biomass", Google, 19 November 2008 (2008-11-19), page 1, XP002616373, Retrieved from the Internet: URL:aiche.confex.com/aiche/2008/te m/P128977.HTM [retrieved on 2011-01-12]
B1	Non PT citation	DEVERELL: "Ethanol production from wood hydrolysates using Pachysolen Tannophilus", BIOTECHNOLOGY LETTERS, vol. 5, 1983, pages 475-480, XP002616374,
B1	Non PT citation	HENDRIKS ET AL: "Pretreatments to enhance the digestibility of lignocellulosic biomass", BIORESOURCE TECHNOLOGY, vol. 100, 2 July 2008 (2008-07-02), pages 10-18, XP025407559,
B1	Non PT citation	SJÖDE ET AL: "The potential in bioethanol production from waste fiber sludges in pulp mill-based biorefineries", APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol. 136-140, 2007, pages 327-338, XP002528608,
B1	Non PT citation	SIMS ET AL: "From 1st- to 2nd-generation biofuel technologies", 2007, INTERNATIONAL ENERGY AGENCY, XP002528609, Retrieved from the Internet: URL:www.iea.org/textbase/papers/20 iofuel_Gen.pdf> * See section 4.1; only pages 44-54 are provided *

B1	Non PT citation	ASSARSSON ET AL: "Utvecklingsmöjligheter inom biokombinatet i Alfredshem", 2005, PROCESSUM TECHNOLOGY PARK, ÖRNSKÖLDSVIK, SWEDEN, XP002528610, Retrieved from the Internet: URL:www.processum.se/press/filer/B rapp_low.pdf> [retrieved on 2009-05-18] * See pages 15 and 16 *
B1	Non PT citation	KUHAD ET AL: "Hydrolytic potential of extracellular enzymes from a mutant strain of Fusarium oxysporum", BIOPROCESS ENGINEERING, vol. 20, 1999, pages 133-135, XP002528806,
B1	Non PT citation	BJÖRLING ET AL: "Evaluation of xylose-fermenting yeasts for ethanol production from spent sulfite liquor", ENZYME AND MICROBIAL TECHNOLOGY, vol. 11, 1989, pages 240-246, XP023791039,
B1	Non PT citation	ZHU ET AL: "Sulfite pretreatment (SPORL) for robust enzymatic saccharification of spruce and red pine", BIORESOURCE TECHNOLOGY, vol. 100, 31 December 2008 (2008-12-31), pages 2411-2418, XP002528808,
B1	Non PT citation	WANG ET AL: "Sulfite pretreatment to overcome recalcitrance of lignocellulose (SPORL) for robust enzymatic saccharification of hardwoods", BIOTECHNOLOGY

		PROGRESS, vol. 25, 23 June 2009 (2009-06-23), pages 1086-1093, XP002616375,
B1	Non PT citation	DATABASE WPI Thomson Scientific, London, GB; AN 2009-G46615 XP002528611, N.N.: "Preparing fermentable sugar, involves adding cellulose material to aqueous solution of sulfite and alkali compound, dehydrating cellulose product insoluble in sulfonated reaction solution and hydrolyzing product in cellulose enzyme", & CN 101 381 754 A (UNIV SOUTH CHINA SCI & ENG) 11 March 2009 (2009-03-11)
B1	Non PT citation	MORITZ ET AL: "Ethanol production from spent sulfite liquor fortified by hydrolysis of pulp mill primary clarifier sludge", APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol. 57/58, 1996, pages 689-698, XP003030531,
B1	Non PT citation	"Ethanol production from waste biomass: Enzymatic hydrolysis and fermentation of sulphite pulp mill primary clarifier sludge" In: MORITZ (Thesis): 1996, The University of British Columbia, Vancouver, XP003030532, pages 1-129,
B1	Non PT citation	XIN ET AL: "Acceleration of ethanol production from paper mill waste fiber by supplementation with beta-glucosidase", ENZYME AND MICROBIAL TECHNOLOGY, vol. 15, 1993, pages 62-65, XP023679703,

B1	Non PT citation	MAGDZINSKI: "Tembec temiscaming integrated biorefinery", PULP & PAPER CANADA, vol. 107, 2006, pages 44-46, XP003030530,
B1	Non PT citation	ZHU ET AL: "Specific surface to evaluate the efficiencies of milling and pretreatment of wood for enzymatic saccharification", CHEMICAL ENGINEERING SCIENCE, vol. 64, 2009, pages 474-485, XP025869017,
B1	Non PT citation	SHUAI ET AL: "Comparative study of SPORL and dilute-acid pretreatments of spruce for cellulosic ethanol production", BIORESOURCE TECHNOLOGY, vol. 101, 2010, pages 3106-3114, XP026870354,
B1	Non PT citation	ALVIRA ET AL: "Pretreatment technologies for an efficient bioethanol production process based on enzymatic hydrolysis", BIORESOURCE TECHNOLOGY, vol. 101, 2010, pages 4851-4861, XP026986219,
B1	Non PT citation	TOVEN ET AL: "Low temperature sulfonation of lignocellulose for effective biomass deconstruction and conversion" In: "Presented at the Nordic Wood and Biorefinery Conference", 2012, Helsinki, Finland pages 1-2,
B1	Non PT citation	TOVEN ET AL: "Low temperature sulfonation of lignocellulose for effective biomass deconstruction and conversion" In: "Poster at the Nordic Wood and Biorefinery

		Conference", 2012, Helsinki, Finland page 1,
--	--	---