504301743 03/31/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4348424

SUBMISSION TYPE:		NEW ASSIGNME	INT		
ATURE OF CONVEYANCE: ASSIGNMENT					
CONVEYING PARTY DA	АТА				
		Name			Execution Date
WEYERHAEUSER NR (COMPAN				12/01/2016
RECEIVING PARTY DA	ТА				
Name:	INTERN	TIONAL PAPER CO	MPANY		
Street Address:	6400 PC	PLAR AVENUE			
City:	MEMPH	S			
State/Country:	TENNES	SEE			
Postal Code:	38197				
PROPERTY NUMBERS	Total: 2				
Property Type		Numbe	r]	
Application Number:	1	320325			
Application Number:	1	143093			
CORRESPONDENCE D	ΑΤΑ				
Fax Number:	•	06)224-0779			
Correspondence will be using a fax number, if p					
Phone:	•	06)682-8100	ui, it will be ser		211.
Email:	•	iling@cojk.com			
Correspondent Name:	J	ERALD E. NAGAE, ES	SQ.		
Address Line 1:	C	HRISTENSEN O'CON	INOR JOHNSOI	N KINDNES	S
Address Line 2:	1	201 THIRD AVENUE,	SUITE 3600		
Address Line 4:	S	EATTLE, WASHINGT	ON 98101-3029)	
ATTORNEY DOCKET NU	JMBER:	INTP155896/558	37		
NAME OF SUBMITTER:		JERALD E. NAG	AE		
SIGNATURE:		/Jerald E. Nagae	1		
DATE SIGNED:		03/31/2017			
Total Attachments: 15		1			
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PATENT ASSIGNMENT

This PATENT ASSIGNMENT (this "Assignment"), dated as of December 1, 2016, is made between Weyerhaeuser NR Company ("Assignor"), a Washington corporation, located at 33633 Weyerhaeuser Way South, Federal Way, Washington, 98003, United States of America, in favor of International Paper Company ("Assignce"), a New York corporation, located at 6400 Poplar Avenue, Memphis, Tennessee, 38197, United States of America, the purchaser of Assignor's cellulose fibers business (the "Business") pursuant to a Purchase Agreement between Assignee and Assignor, dated as of May 1, 2016 (as amended and restated on August 12, 2016, and as further amended, modified or supplemented from time to time in accordance with its terms, the "Purchase Agreement"). Unless otherwise indicated, capitalized terms used herein without definitions shall have the meanings specified in the Purchase Agreement.

WITNESSETH:

WHEREAS, under the terms of the Purchase Agreement, Assignor has agreed to sell, transfer, assign and deliver to Assignee, among other assets, all rights, title and interest in the patents (including all provisionals, reissues, divisions, continuations, continuations-in-part, reexaminations and extensions thereof) and patent applications, together with any patent disclosures and inventions (whether or not reduced to practice), included as Transferred Intellectual Property (excluding the Transferred Intellectual Property related to northern bleached softwood kraft pulp), including as set forth in Schedule A (collectively, the "Assigned Patents");

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee agree as follows:

SECTION 1. Assignment. Assignor hereby sells, transfers, assigns and delivers to Assignee, and Assignee hereby accepts the sale, transfer, assignment and delivery of, all of Assignor's right, title and interest in, to and under the Assigned Patents together with all the rights of enforcement and the rights, interests, claims and demands recoverable in law or equity, that Assignor has or may have in profits and damages for past, present and future infringements or other conflicts relating to the Assigned Patents, including, without limitation, the right to compromise, sue for and collect such profits and damages; all rights of priority resulting from the filing of the Assigned Patents, and all other rights, including common law rights, relating to the Assigned Patents, to the extent such rights exist or may exist in the future, each to be held and enjoyed by Assignee for its own use and benefit and for the use and benefit of its successors, assigns and legal representatives as said rights would have been held and enjoyed by such Assignor had this assignment and sale not been made; provided, however, that this Assignment shall not constitute an assignment to the extent that, if it were to sell, transfer, assign or deliver an interest in and to the Assigned Patents, it would impair the subsequent lawful and effective execution and recordation of a necessary country-specific form of assignment.

[[3600204]]

SECTION 2. <u>Recordation</u>. Assignor hereby authorizes the Commissioner for Patents in the United States Patent and Trademark Office and other empowered officials of the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Assignment upon request by Assignce.

SECTION 3. <u>No Modification of the Purchase Agreement</u>. This Assignment shall not enlarge, restrict or otherwise modify the terms of the Purchase Agreement or constitute a waiver or relapse of any of the terms of the Purchase Agreement, including, without limitation, the representations, warranties, covenants, agreements and indemnities set forth in the Purchase Agreement. In the event of any conflict between the provisions of this Assignment, on the one hand, and the provisions of the Purchase Agreement, on the other hand, the provisions of the Purchase Agreement shall control.

SECTION 4. Severability. The invalidity, illegality or unenforceability of any portion of this Assignment shall not affect the validity, force or effect of the remaining portions of this Assignment. If it is ever held that any restriction hereunder is too broad to permit enforcement of such restriction to its fullest extent, each party agrees that a court of competent jurisdiction may enforce such restriction to the maximum extent permitted by Law, and each party hereby consents and agrees that such scope may be judicially modified accordingly in any proceeding brought to enforce such restriction.

SECTION 5. <u>Counterparts</u>. This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement, and shall become effective when one or more counterparts have been signed by each of the parties hereto and delivered to the other parties.

SECTION 6. Successors and Assigns. Neither this Assignment nor any of the rights, interests or obligations of the parties hereunder may be assigned by any of the parties (including by operation of Law or otherwise) without the prior written consent of the other parties. Any attempted assignment in violation of this Section 6 shall be void. Subject to the immediately preceding sentences, this Assignment shall be binding upon, inure to the benefit of, and be enforceable by, the parties hereto and their respective successors and permitted assigns.

SECTION 7. Governing Law; Enforcement. This Assignment and disputes relating hereto (whether for breach of contract, tortious conduct or otherwise) shall be governed by, and construed in accordance with, the Laws of the United States, in respect to patent issues and in all other respects, including as to validity (except for patent issues), interpretation and effect by the Laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws thereof. Any disputes shall be resolved in accordance with Section 11.10 of the Purchase Agreement. IN CONNECTION WITH ANY DISPUTE HEREUNDER, EACH PARTY HERETO WAIVES ITS RIGHT TO TRIAL OF ANY ISSUE BY JURY.

[[3600294]]

SECTION 8. <u>Amendments: Waiver</u>. This Assignment may be amended, modified, superseded or canceled only by an instrument in writing signed by the Assignor and Assignee. Any of the provisions hereof may be waived only by an instrument in writing signed by or on behalf of the party waiving compliance. The failure or delay by any party to this Assignment to assert any of its rights under this Assignment or otherwise shall not constitute a waiver of such rights nor shall any single or partial exercise by any party to this Assignment of any of its rights under this Assignment preclude any other or further exercise of such rights or any other rights under this Assignment.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Assignor has duly executed and delivered this Patent Assignment as of the date first written above.

WEYERHAEUSER N& COMPANY By: /

Name: Title:

Devin W. Slockfish SVP, General Counsel and Corporate Secretary

AGREED TO AND ACCEPTED:

Ву:	
Name:	
Title:	

[Signature Page to Weyerhaeuser Patent Assignment]

PATENT REEL: 041816 FRAME: 0584

141.

IN WITNESS WHEREOF, Assignor has duly executed and delivered this Patent Assignment as of the date first written above.

WEYERHAEUSER NR COMPANY

By: ______ Name: Title:

AGREED TO AND ACCEPTED:

INTERNATIONAL PAPER COMPANY-By: C. Cato Ealy

SVP Corporate Development

[Signature Page to Weyerhaeuser Patent Assignment]

3.1

SCHEDULE A

ASSIGNED PATENTS AND PATENT APPLICATIONS

Application No.	Patent No.	Country	Filing Date	Issue Date
08768616	5755828	US	Dec 18, 1996	May 26, 1998
09039737	6235392	US	Mar 16, 1998	May 22, 2001
09185423	6306334	US	Nov 3, 1998	Oct 23, 2001
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2003588017	4248413	- Jb	Apr 25, 2003	Jan 23, 2009
2006220947	4134209	IP	Aug 14, 2006	Jun 6, 2008
2012510807	5551768	JP	Mar 30, 2010	May 30, 2014
2010120521	5331059	JP	May 26, 2010	Aug 2, 2013
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2013515380	5698839	JP	Jun 7, 2011	Feb 20, 2015
2011232463	5491477	JP	Oct 24, 2011	Mar 7, 2014
2012145724	5452670	JP	Jun 28, 2012	Jan 10, 2014
2014556535	**	JP	Nov 29, 2012	
2014556536		JP	Nov 29, 2012	~~
2014556537		JP	Nov 29, 2012	
2014556538		JP	Nov 29, 2012	
2014556539		JP	Nov 29, 2012	
2014556540	5932063	JP	Nov 29, 2012	May 13, 2016
2014556541		JP	Nov 29, 2012	·····
2013068782	**	JP	Mar 28, 2013	- in st
2013243869	5752215	JP	Nov 26, 2013	May 29, 2015
2014214751	<b>***</b> *:	JP	Oct 21, 2014	~~
97709407	266197	KR	Dec 15, 1997	Jun 22, 2000
20007006356	0504221	KR	Dec 9, 1998	Jul 20, 2005
20050013930	0631233	KR	Feb 21, 2005	Sep 26, 2006
20070099303	0914096	KR	Oct 2, 2007	Aug 19, 2009
10-2010-0052237	1222323	KR	Jun 3, 2010	Jan 8, 2013
10-2012-7007963	1357349	KR	Sep 28, 2010	Jan 23, 2014
10-2012-0070661	1368529	KR	Jun 29, 2012	Feb 21, 2014
PAA00005812	217055	MX	Dec 9, 1998	Oct 20, 2003
PAA02011317	244763	MX	Apr 11, 2001	Apr 3, 2007
MXA07012273	269229	MX	Oct 2, 2007	Aug 14, 2009

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MXA2010006286	323939	MX	Jun 8, 2010	Sep 25, 2014
MXA2012007722	320568	MX	Jun 29, 2012	May 27, 2014
MXA2014009779	<b>**</b>	MX	Nov 29, 2012	·····
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MXA2014009783	**	MX	Nov 29, 2012	* *
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Pl 2010001569	MY-145920-A	MY	Apr 8, 2010	May 11, 2012
Pl 2010001570	MY-146778-A	MY	Apr 8, 2010	Sep 28, 2012
PI 2012002762	**	МΥ	Jun 18, 2012	
526415	526415	NZ	Jun 11, 2003	Mar 10, 2005
052512092	1582624	PL	Mar 1, 2005	Aug 13, 2014
999098072	1068376	SE	Mar 3, 1999	Nov 26, 2003
019268929	1311717	SE	Apr 11, 2001	Aug 9, 2006
032573164	1435408	SE	Nov 19, 2003	Jul 29, 2009
032579435	1441050	SE	Dec 17, 2003	Jan 23, 2008
032580177	1435404	SE	Dec 18, 2003	Mar 8, 2006
032579898	1437428	SE	Dec 18, 2003	Nov 30, 2005
032580078	1435403	SE	Dec 18, 2003	Nov 30, 2005
14515522	<b>ui ur</b>	SE	Dec 16, 2014	
0701003250	i de la compañía de l	TH	Jun 21, 2007	
1001000782		TH	May 25, 2010	
1001000783	**	TH	May 25, 2010	
1001000832	**	TH	Jun 4, 2010	
1301004439	<b>B B</b>	TH	Feb 10, 2012	**
1201003305		TH	Jun 29, 2012	
1401004649		TH	Nov 29, 2012	() <del>.</del>
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052512092	1582624	TR	Mar 1, 2005	Aug 13, 2014
90109445	NI-194651	TW	Apr 19, 2001	Jan 21, 2004
090109526	NI-189894	TW	May 15, 2001	Nov 11, 2003
092136706	1238861	T₩	Dec 24, 2003	Sep 1, 2005
097110422	1356104	TW	Mar 24, 2008	Jan 11, 2012
099116716	1411591	TW	May 25, 2010	Oct 11, 2013
099116715	1405741	TW	May 25, 2010	Aug 21, 2013
099117981	1454605	ŤŴ	Jun 3, 2010	Oct 1, 2014
200309833	2003/09833	ZA	Dec 18, 2003	Oct 27, 2004
200309826	2003/09826	ZA	Dec 18, 2003	Oct 27, 2004
200309829	2003/09829	ZA	Dec 18, 2003	Aug 25, 2004
200309831	2003/09831	ZA	Dec 18, 2003	Oct 27, 2005
201204770	2012/04770	ZA	Jun 27, 2012	Mar 27, 2013
PCTUS1529308	n/a	WO	May 5, 2012	n/a

PCTUS1537441	n/a	WO	Jun 24, 2015	n/a
PCTUS1553400	n/a	WO	Oct 1, 2015	n/a
15253450	~~	US	Aug 31, 2016	888 ⁰
15355697		US	Nov 18, 2016	
10003862.9		AT	Apr 12, 2010	Attai
10003886.8		AT	Apr 13, 2010	
12173624.3		AT	Jun 26, 2012	
10003862.9		BE	Apr 12, 2010	
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10003886.8	~~	СН	Apr 13, 2010	***
Nat'l PCT/US15/29308		CN	May 5, 2015	ian i
Nat'l PCT/US15/37441	- jacia-	CN	Jun 24, 2015	- <b>5-5</b> -5
201610591316.1		CN	Jul 25, 2016	(xx)
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121736243	2540686	DE	Jun 26, 2012	Nov 30, 2016 *Scheduled to grant
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10003886.8		DK	Apr 13, 2010	
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Nat'l PCT/US15/37441	~~	EP	Jun 24, 2015	
16180654.2	میں میں ایک	EP	Jul 21, 2016	
10003862.9		ES	Apr 12, 2010	
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10003862.9		FR	Apr 12, 2010	·***
10003886.8		FR	Apr 13, 2010	
121736243	2540686	FR	Jun 26, 2012	Nov 30, 2016 *Scheduled to grant
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10003886.8	· • • •	GB	Apr 13, 2010	(%+%)
121736243	2540686	GB	Jun 26, 2012	Nov 30, 2016 *Scheduled to grant
P00201000350	IDP000039631	ID	May 26, 2010	Oct 19, 2015
975DEL2010		IN	May 26, 2010	••••
201617037088		IN	May 5, 2015	· • • • • • • • • • • • • • • • • • • •
Nat'l PCT/US15/37441		IN	Jun 24, 2015	
201614024882		IN	Jul 20, 2016	
2016148441		JP	Nov 29, 2012	
2016149812		JÞ	Nov 29, 2012	
2016156277		JP	Nov 29, 2012	
2016-562896	~~	JP	May 5, 2015	
Nat'l PCT/US15/37441		JP	Jun 24, 2015	
Nat'l PCT/US15/29308		MX	May 5, 2015	,×*

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