PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3305969

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| KATI ESKELINEN | 12/08/2014 |
| SANNA VALKONEN | 12/12/2014 |
| SUVI PIETARINEN | 12/04/2014 |

RECEIVING PARTY DATA

| Name: | UPM-KYMMENE CORPORATION |
|-----------------|-------------------------|
| Street Address: | ALVAR AALLON KATU 1 |
| City: | HELSINKI |
| State/Country: | FINLAND |
| Postal Code: | FI-00100 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14405873 |

CORRESPONDENCE DATA

Fax Number: (612)332-9081

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Email: mcaufman@merchantgould.com

DENNIS R. DALEY Correspondent Name: Address Line 1: P.O. BOX 2903

Address Line 2: MERCHANT & GOULD P.C.

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

| ATTORNEY DOCKET NUMBER: | 07510.0315FPWO |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | DENNIS R. DALEY |
| SIGNATURE: | /Dennis R. Daley/ |
| DATE SIGNED: | 04/10/2015 |

Total Attachments: 6

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PATENT REEL: 035382 FRAME: 0066 503259351

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> PATENT REEL: 035382 FRAME: 0067

| INSTRUCTIONS | U.S. ASSIGNMENT TO CORPORATION |
|--|--|
| | WHEREAS, |
| Inventor(s) Name, Address, Citizenship | 1. <u>Kati ESKELINEN</u> residing at <u>Tuulikinkuja 5, FI-55100 lmatra, Finland;</u> 2. <u>Sanna VALKONEN</u> residing at <u>Tuulimyllynkatu 46 B 9, FI-53500</u> <u>Lappeenranta, Finland;</u> 3. <u>Suvi PIETARINEN</u> residing at <u>Mäkikatu 21 A, FI-53100 Lappeenranta,</u> Finland; |
| Check the appropriate box and fill in the requested information: select the first check box if the application is a national stage of a PCT application and provide the international application number and filing date before sending the assignment for execution; select the second check box if the application will be filed without the executed assignment is executed and the serial number and filing date of the U.S. application are known, provide this information before recordation; select the third check box if the application was previously filed and provide the serial number and filing date before sending the assignment for execution; or | (herein called "THE UNDERSIGNED") have made an invention and have executed an application for Letters Patent of the United States entitled A METHOD FOR FRACTIONATING LIGNIN and which: □ is the national stage application of International Application No. PCT/F12013/050607 filed on 5 June 2013; □ will be filed without this executed PATENT ASSIGNMENT. THE UNDERSIGNED hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Merchant & Gould PC, who are associated with customer number 23552, to insert here in parenthesis (U.S. Serial No |
| Name of Corporation | AND WHEREAS <u>UPM-Kymmene Corporation</u> (herein called "ASSIGNEE"), a corporation organized under the laws of <u>Finland</u> , and having an office and place of business at <u>Alvar Aallon katu 1, FI-00100 Helsinki</u> |
| State or Country of Incorporation and Address | wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor; |
| | NOW, THEREFORE, for and in consideration of the sum of One Dollar and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign and transfer to the ASSIGNEE, its successors and assigns, the entire right, title and interest for all countries in and to the invention disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of |

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such patents, and in and to any and all applications which have been or shall be filed in all countries for Letters Patent on the said invention including as assignment of all rights under the provisions of the International Convention, and all Letters Patent of all countries which may be granted therefrom; and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to the ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns. THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be. THE UNDERSIGNED represent and agree with said ASSIGNEE its successors and assigns, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED. IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below. Each inventor must sign & date Note: No legalization or other witness required Signature: Name: Kati ESKELINEN Signature: Name: Sanna VALKONEN Signature: Date: Name: Suvi PIETARINEN

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| State or Country of Incorporation and Address | wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor; NOW, THEREFORE, for and in consideration of the sum of One Dollar and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign and transfer to the ASSIGNEE, its successors and assigns, the entire right, title and interest for all countries in and to the invention disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of |

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such patents, and in and to any and all applications which have been or shall be filed in all countries for Letters Patent on the said invention including as assignment of all rights under the provisions of the International Convention, and all Letters Patent of all countries which may be granted therefrom; and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to the ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said ASSIGNEE its successors and assigns, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.

Each inventor must sign & date Note: No legalization or other witness required

| Name: Kati ESKELINEN | Signature: | Date: |
|-----------------------|------------|------------------|
| Name: Sanna VALKONEN | Signature: | Date: /2 /2.20/4 |
| Name: Suvi PIETARINEN | Signature: | Date: |

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