Patent and Tostemark of Patent Andress i Patent Application number(s) or patent numbers(s): <ul> <li>Name: Auton Patent Application No.</li> <li>Filing date</li> <li>Filing date</li></ul>		Docket No.: AML/13423.23
Table endorsable Commissioner of Patents and industrients 11/2/2017 12/291       To the Honorable Commissioner of Patents and industrients 11/2/2019         Is the Honorable Commissioner of Patents and industrients 11/2/2019       Industrients 11/2/2019         Noranda Inc.       Industrients 11/2/2019         Additional names(s) of conveying party(ies)       Yes XI No         Security Agreement       Change of Name         Other       State/Prov.: Ontario         Security Agreement       Change of Name         Other       Country: Canada         ZIP: MSC 2W4       Additional name(s) & address(ce)         Application number(s) or patent numbers(s):       If the document is being filed together with a new application, the execution date of the application is:         Patent Application No.       Filing date         Solute States       If Yes Xin No         Solute and address of party to whom correspondence       Filing date         Concerning document should be malled:       Fortal number of applications and patents involved:         Name: Atain M. Leclerc c/o Goudrau Gage Dubue       Total fee (37 CFR 3.41):       S 40.00         Registration No.       State/Prov:       Quebec         City: Montreal       State/Prov: Quebec       Solutorized to be charged to deposit account         Solute 300, Stack Exchange Tower       Solutorized to be charged to deposit accou	(Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002)	Patent and Trademark Office
1. Name of conveying party(ies): Noranda Inc.       2. Name and address of receiving party(ies): Name: Nextor Inc.         Additional names(s) of conveying party(ies):       Yes 🖄 No         3. Nature of conveying party(ies):       Yes 🖄 No         4. Application number(s) or patent numbers(s):       H this document is being filed together with a new application, the exocution date of the application is:         Patent Application No.       Filing date       B. Patent No (s)         State Prov:       State Prov:       State Prov:         S. Name and address of party to whom correspondence concerning document should be maledic:       6. Total number of applications and patents involved:       1         Name:       Address: 800 Place-Vitetria       P. No       340.00       Enclosed - Any excass or insufficiency should be credited of debited to deposit account         P.O. Box 242       State/Prov:		
Noranda Inc.       Name: Nexfor Inc.         Additional names(s) of conveying partylles)       Yes 21 No         Suite 500       Suite 500         3. Nature of conveying partylles)       Yes 21 No         Suite 500       Suite 500         3. Nature of conveying partylles)       Yes 21 No         Suite 500       Suite 500         3. Nature of conveyance:       Suite 500         2. Assignment       Change of Name         City: Toronate       State/Prov.: Ontario         Country: Canada       ZiP: MSC 2W4         Execution Date: June 19, 2003       Additional name(s) & address(es)       Yes 21 No         4. Application number(s) or patent numbers(s):       If this document is being field together with a new application, the execution date of the application is:         Patent Application No.       Filing date       B. Patent No (s)         5. Name and address of party to whom correspondence concerning document should be mailed:       Registration No. 37036       B. Total number of applications and patents involved:       1         7. Total fee (37 CFR 3.41):       S 40.00       Enclosed - Any excess or insufficiency should be cordiated or debiated to deposit account       2         9. Deposi: account number:       City: Montreal       State/Prov: Quebee       27:1742         Country: Canada       ZiP: H4Z LE9	To the Honorable Commissioner of Patents and Trademarks	ched original documents or copy thereof.
Adational names(s) of conveying party(les)       Yes 20 Nc         Suite 500         3. Nature of conveyance:         24 Assignment       Merger         3. Security Agreement       Change of Name         Other       Country: Canada         21 Other       Country: Canada         22 Other       Country: Canada         23 Assignment       Change of Name         Other       Country: Canada         21 Other       Country: Canada         22 Other       Country: Canada         23 Assignment       B. Patent No.(s)         4. Application number(s) or patent numbers(s):       If this document is being filed together with a new application, the execution date of the application is:         Patent Application No.       Filing date         5.540.392       Issued on July 30, Till         1996       July 30, Till         1996       State/Prov: State         5.100.392       Issued on July 30, Till         1996       July 30, Till		2. Name and address of receiving party(ies):
Additional names(s) of conveying party(les)       Yes XI No         Subtract of conveyance:       Xasignment         Assignment       Merger         Security Agreement       Change of Name         Other       Country: Canada         Other       Country: Canada         Execution Date:       June 19, 2003         Application number(s) or patent numbers(s):       If this document is being filed together with a new application, the execution date of the application is:         Patent Application No.       Filing date         State/Prov.       B. Patent No.(s)         State 4.00 M       Additional numbers         State 7.7742       State 7.7742         Name:       Alain M. Lecterc c/o Goodrfan Gage Dubuc         Name:       Alain M. Lecterc c/o Goodrfan Gage Dubuc         Registration No.       37036         Address:       S00 Place-Victoria         P.O. Box 212       State/Prov:         Suite 3400, Stock Exchange Tower       0.171742         Country:       Cana		
Assignment       Merger         Security Agreement       Change of Name         Other       Country: Canada       ZIP: M5C 2W4         Execution Date: June 19, 2003       Additional name(s) & address(es)       Yes       No         4. Application number(s) or patent numbers(s):       If this document is being flied together with a new application, the execution date of the application is:       Patent Application No.       Filing date       B. Patent No.(s)         State 400 m       Additional numbers       S.540.392       Issued on July 30, Time flied together with a new application, the execution date of the application is:         Patent Application No.       Filing date       B. Patent No.(s)         S.540.392       Issued on July 30, Time flied together with a new application numbers       Ves Is No         S. Name and address of party to whom correspondence concerning document should be mailed:       6. Total number of applications and patents involved:       1         Name:       Alain M. Lecterc ola Goudrau Gage Dubue       7. Total fee (37 CFR 3.41):       \$ 40.00       5.40.00         Registration No.       37036       Registration No. State/Prov:: Quebee       0?-1742       Yes Is No         City:       Montreal       State/Prov:: Quebee       0?-1742       Yes State doposit account       8         S. Statement and signature.       To the best of my knowledge and b		Address: 1, Toronto Street
S Assignment       Merger         Security Agreement       Change of Name         Other       Country: Canada         ZIP: MSC 2W4         Execution Date: June 19, 2003       Additional name(s) & address(es)       Ves         4. Application number(s) or patent numbers(s):       If this document is being filed together with a new application, the execution date of the application is:       Press 2003         Patent Application No.       Filing date       B. Patent No.(s)       Filing date         S. Name and address of party to whom correspondence concerning document should be mailed:       Ves 20 No       Filing date         Name: Alain M. Lecterc to Goudfau Gage Dubuc       7. Total fee (37 CFR 3.41):	Additional names(s) of conveying party(ies)	Suite 500
Socurity Agreement       Change of Name       City: Toronto       State/Prov.: Ontario         Other       Country: Canada       ZIP: MSC 2W4         Execution Date: June 19, 2003       Additional name(s) & address(es)       Pes       Execution number(s) or patent numbers(s):         If this document is being filed together with a new application, the execution date of the application is:       Patent Application No.       Filing date       B. Patent No.(s)         Patent Application No.       Filing date       B. Patent No.(s)       Filing date       State/Prov.: Queter         5. Name and address of party to whom correspondence concerning document should be mailed:       Country: Canada       QUIV: 71/4       State/Prov.: Queter         Name: Alain M. Lecterc c'o Goudfau Gage Dubue       7. Total fee (37 CFR 3.41):	3. Nature of conveyance:	
Other       Country: Canada       ZIP: M5C 2W4         Execution Date: June 19, 2003       Additional name(s) & address(es)       If yes SI No         4. Application number(s) or patent numbers(s):       If this document is being filed together with a new application, the execution date of the application is:       If yes SI No         9 Atom Application No.       Filing date       B. Patent No.(s)       If Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       Filing date       B. Patent No.(s)       If The Status         9 Atom Application No.       State Application Applications and patents involved:       I         1       Name:       Alain M. Leclerc of Goudfau Gage Dubuc       State/Prov.: Quebee       Authorized to be charged to deposit account         1       Name:       State/Prov.: Quebee       07-1742       If Application Applicaticocopy of this page if paying by deposit account	🖾 Assignment 🔲 Merger	
Execution Date: June 19, 2003       Additional name(s) & address(cs)       I Yes INO         4. Application number(s) or patent numbers(s):       If this document is being filed together with a new application, the execution date of the application is:       I Yes INO         Patent Application No.       Filing date       B. Patent No.(s)       I Yes INO         Patent Application No.       Filing date       B. Patent No.(s)       I Yes INO         State I       44.00 M       Additional numbers       Yes INO       I Yes INO         5. Name and address of party to whom correspondence concerning document should be mailed:       6. Total number of applications and patents involved:       1         Name:       Alain M. Lectere c/o Goudfau Gage Dubue       7. Total fee (37 CFR 3.41):	Security Agreement     Change of Name	City: Toronto State/Prov.: Ontario
4. Application number(s) or patent numbers(s):         If this document is being filed together with a new application, the execution date of the application is:         Patent Application No.       Filing date         B. Patent No.(s)       B. Patent No.(s)         Statement and signature.       Additional numbers         Yes ⊠ No       Enclosed - Any excess or insufficiency should be credited to deposit account         Matter State       State/Prov: Queber         City: Montreal       ZIP: H4Z IE9         ON NOT USE THIS SPACE       ON OT USE THIS SPACE         9. Statement and signature.       To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       Signature         P.O. Box 242       State/Prov: Queber         Suite 3400, Stock Exchange Tower       07-1742         City: Montreal       ZIP: H4Z IE9         ON OT USE THIS SPACE       Story 2 (c; 3)         9. Statement and signature.       To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       Signature         Name of Person Signing       Signature         Man counted to be receded the Mathematic cover sheet tempatic       Date	G Other	Country: Canada ZIP: M5C 2W4
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Additional numbers       Yes ⊠ No         5. Name and address of party to whom correspondence concerning document should be mailed:       6. Total number of applications and patents involved:       1         Name:       Alain M. Leclerc c/o Goudfau Gage Dubuc       6. Total number of applications and patents involved:       1         Name:       Alain M. Leclerc c/o Goudfau Gage Dubuc       7. Total fee (37 CFR 3.41):	Patent Application No. Filing date	B. Patent No.(s) 5,540,392 Issued on July 30, 7 1 1996
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concerning document should be mailed:       6. Total number of applications and patents involved:       1         Name:       Alain M. Leclerc c/o Goudfau Gage Dubuc       7. Total fee (37 CFR 3.41):\$ 40.00         Registration No.       37036       Image: Enclosed - Any excess or insufficiency should be credited or debited to deposit account         Address:       800 Place-Victoria       Image: Enclosed - Any excess or insufficiency should be credited or debited to deposit account         Suite 3400, Stock Exchange Tower       8. Deposit account number:       07-1742         City:       Montreal       ZIP:       H4Z 1E9         ON ONT USE THIS SPACE       9. Statement and signature.       7. Total fore going information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       Signature       30 JU-Y 2 CC 3         Name of Person Signing       Signature       4         Mail documents to be recorded with required cover sheet information to:       1	Additional numbers	
Registration No.       37036         Address:       800 Place-Victoria         P.O. Box 242       Image: Control of the c	\	6. Total number of applications and patents involved:
Address:       800 Place-Victoria         P.O. Box 242       Authorized to be charged to deposit account         Suite 3400, Stock Exchange Tower       8. Deposit account number:         City:       Montreal         State/Prov.:       Quebec         Country:       Canada         ZIP:       H4Z 1E9         ONOT USE THIS SPACE         9.       Statement and signature.         To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       30         Name of Person Signing       Signature         Total number of pages including cover sheet, attachments, and       4         Mail documents to be recorded with required cover sheet information to:	Name: Alain M. Leclerc c/o Goudfau Gage Dubuc	7. Total fee (37 CFR 3.41):\$ 40.00
Address: 500 Frace-victoria         P.O. Box 242         Suite 3400, Stock Exchange Tower         City: Montreal       State/Prov.: Quebec         Country: Canada       ZIP: H4Z 1E9         ONOT USE TH/S SPACE         9. Statement and signature.         To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc         Name of Person Signing         Total number of pages including cover sheet, attachments, and         Mail documents to be recorded with required cover sheet information to:		
Suite 3400, Stock Exchange Tower       8. Deposit account number:         City: Montreal       State/Prov.: Quebec       07-1742         Country: Canada       ZIP: H4Z 1E9       (Attach duplicate copy of this page if paying by deposit account)         Do Not Use THIS SPACE       9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.       30 JU-Y 2CC 3         Alain M. Leclerc       Signature       4         Name of Person Signing       Date         Mail documents to be recorded with required cover sheet information to:       4		-
Country:       Canada       ZIP:       H4Z 1E9       (Attach duplicate copy of this page if paying by deposit account)         DO NOT USE THIS SPACE       9. Statement and signature.       To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       30       JU-Y       2 (C 3)         Name of Person Signing       Signature       4       Date         Mail documents to be recorded with required cover sheet information to:       10       Mail required cover sheet information to:		8. Deposit account number:
DO NOT USE THIS SPACE         9. Statement and signature.         To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc         Name of Person Signing         Total number of pages including cover sheet, attachments, and         Mail documents to be recorded with required cover sheet information to:	City: Montreal State/Prov.: Quebec	07-1742
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Alain M. Leclerc Name of Person Signing Total number of pages including cover sheet, attachments, and Mail documents to be recorded with required cover sheet information to:	Country: Canada ZIP: H4Z 1E9	(Attach duplicate copy of this page if paying by deposit account)
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.         Alain M. Leclerc       30 JU-Y 2C23         Name of Person Signing       signature         Total number of pages including cover sheet, attachments, and       4         Mail documents to be recorded with required cover sheet information to:	DO NOT	LUSE THIS SPACE
Alain M. Leclerc       30 JU-Y 2CC3         Name of Person Signing       Signature         Total number of pages including cover sheet, attachments, and       4         Mail documents to be recorded with required cover sheet information to:       4	To the best of my knowledge and belief, the foregoing inform	nation is true and correct and any attached copy is a true copy
Name of Person Signing Total number of pages including cover sheet, attachments, and Mail documents to be recorded with required cover sheet information to:	•	30 JULY 2003
Mail documents to be recorded with required cover sheet information to:	Name of Person Signing	Signature Date
Commissioner of Patents & Trademarks, Box Assignments DATENIT	Mail documents to be recorded wi	th required cover sheet information to:

REEL: 014337 FRAME: 0881

## **ASSIGNMENT OF INVENTION**

## UNIVERSAL

BETWEEN:	NORANDA INC., a company duly incorporated under the laws of Ontario, having its principal place of business at BCE Place, suite 4100, 181 Bay Street, Toronto, Ontario, Canada M5J 2T3, hereinafter represented by Mr. Serge Bélisle,
	(hereinafter referred to as the "Assignor")
AND:	<b>NEXFOR INC.</b> , a corporation duly incorporation under the laws of Canada, having its principal place of business at 1, Toronto Street, suite 500, Toronto, Ontario, Canada M5C 2W4, hereinafter represented by Dr. Alan Potter,
	(hereinafter referred to as the "Assignee")

WHEREAS the Assignor is the owner by previous assignment of an invention described in a Patent in Canada issued under number 2,150,647 entitled «Optimal Energy Refining Method for the Mechanical Treatment of Wood Fibres», and in a patent in United States issued under number 5,540,392, entitled «Optimal Energy Refining Process for the Mechanical Treatment of Wood Fibres»

WHEREAS the Assignee is desirous of acquiring the entire right, title and interest in and to said invention and said patents;

## THE PARTIES AGREE AS FOLLOWS:

In consideration of the sum of one dollar (\$1.00) and other valuable consideration, the receipt of which is hereby acknowledged, the Assignor does hereby sell, assign and transfer unto said Assignee, its successors and assigns, the entire right, title and interest in and to said invention and said patents, also the entire right, title and interest in and to any and all patents, reissues or extensions thereof to be obtained and any divisional, continuation, continuation-in-part, substitute application(s) or supplementary disclosure(s) which may be filed upon said patent and patent applications, in any country; and the Assignor hereby authorizes and requests the issuing authority to issue any and all patent on said patent application to said Assignee.

PATENT REEL: 014337 FRAME: 0882 Furthermore, the Assignor agrees without any payment by said Assignee other than expenses incurred by the undersigned, to communicate to said Assignee, its representatives or agents, any facts relating to said invention or inventions, including evidence for interference purposes or for other proceedings, whenever requested; testify in any interference, litigation or other proceedings, whenever requested; and execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon the heirs, legal representatives, administrators and assigns of the Assignor.

The parties hereto have requested that the present assignment be drawn up in English. Les parties aux présentes ont exigé que la présente cession soit rédigée en anglais.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seal at 2003. Montreal, on

NORANDA INC.

By: e Bélis

Vitness name (in block letters)

**NEXFOR INC.** 

Nella Choleau Witness name (in block letters)

By:

Alan Potter