

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6944985

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT	09/23/2021

RECEIVING PARTY DATA

Name:	LONGYEAR TM, INC.
Street Address:	2570 WEST 1700 SOUTH
City:	SALT LAKE CITY
State/Country:	UTAH
Postal Code:	84104

PROPERTY NUMBERS Total: 120

Property Type	Number
Patent Number:	9399898
Patent Number:	9404311
Patent Number:	9421671
Patent Number:	9446503
Patent Number:	9234399
Patent Number:	9500036
Patent Number:	9506298
Patent Number:	9528337
Patent Number:	9689222
Patent Number:	9546524
Patent Number:	9903165
Patent Number:	9540883
Patent Number:	9637980
Patent Number:	7967085
Patent Number:	10053973
Patent Number:	7997167
Patent Number:	8051925
Patent Number:	D643859
Patent Number:	10047581
Patent Number:	D644668

PATENT

Property Type	Number
Patent Number:	D649167
Patent Number:	9089904
Patent Number:	D664567
Patent Number:	D643443
Patent Number:	D664566
Patent Number:	D647540
Patent Number:	8261857
Patent Number:	7628228
Patent Number:	8051929
Patent Number:	8869918
Patent Number:	8485280
Patent Number:	9234398
Patent Number:	9051786
Patent Number:	D630656
Patent Number:	D647115
Patent Number:	8459381
Patent Number:	9074429
Patent Number:	D647114
Patent Number:	D622745
Patent Number:	10077609
Patent Number:	9279292
Patent Number:	7828090
Patent Number:	7874384
Patent Number:	6634443
Patent Number:	7779932
Patent Number:	8794355
Patent Number:	9328608
Patent Number:	8146686
Patent Number:	7695542
Patent Number:	8783384
Patent Number:	8006783
Patent Number:	8333255
Patent Number:	9359847
Patent Number:	8118113
Patent Number:	8590646
Patent Number:	8991524
Patent Number:	9267332
Patent Number:	8474547

Property Type	Number
Patent Number:	7921926
Patent Number:	D687862
Patent Number:	D687863
Patent Number:	D687864
Patent Number:	8770322
Patent Number:	8051924
Patent Number:	8191445
Patent Number:	8356677
Patent Number:	7770668
Patent Number:	8118118
Patent Number:	7997351
Patent Number:	8770319
Patent Number:	D650052
Patent Number:	D649228
Patent Number:	D648836
Patent Number:	8006782
Patent Number:	8668029
Patent Number:	D622293
Patent Number:	D622741
Patent Number:	D622294
Patent Number:	D624564
Patent Number:	9121236
Patent Number:	6425449
Patent Number:	8028613
Patent Number:	8347984
Patent Number:	7984773
Patent Number:	8336647
Patent Number:	10384907
Patent Number:	10626684
Patent Number:	10633943
Patent Number:	10702975
Patent Number:	10830013
Patent Number:	10919726
Application Number:	15232452
Application Number:	15303668
Application Number:	14585736
Application Number:	14585716
Application Number:	14584877

Property Type	Number
Application Number:	14566389
Application Number:	14500012
Application Number:	14870247
Application Number:	14876501
Application Number:	14993550
Application Number:	15010672
Application Number:	15311592
Application Number:	15378992
Application Number:	15379016
Application Number:	62358653
Application Number:	62425230
Application Number:	62358652
Application Number:	15965243
Application Number:	16017334
Application Number:	14790069
Application Number:	15544741
Application Number:	16035776
Application Number:	16151871
Application Number:	16506444
Application Number:	16588026
Application Number:	16899236
Application Number:	17082877
PCT Number:	US1653703
Patent Number:	9784038

CORRESPONDENCE DATA

Fax Number: (212)530-5219
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.
Phone: 2125305243
Email: dcip@milbank.com, ehyla@milbank.com
Correspondent Name: ERIC HYLA, ESQ.
Address Line 1: 55 HUDSON YARDS
Address Line 2: MILBANK, LLP
Address Line 4: NEW YORK, NEW YORK 10001-2163

ATTORNEY DOCKET NUMBER:	42910.00000
NAME OF SUBMITTER:	ERIC HYLA
SIGNATURE:	/Eric Hyla/
DATE SIGNED:	09/30/2021

source=BLY - Omnibus Release of Security Interests in Patents (Term Loan B) [Executed]#page96.tif
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OMNIBUS RELEASE OF SECURITY INTERESTS IN PATENT COLLATERAL

This **OMNIBUS RELEASE OF SECURITY INTERESTS IN PATENT COLLATERAL** (this “Release”) is made as of September 23, 2021 by WILMINGTON TRUST, NATIONAL ASSOCIATION in its capacity as collateral agent pursuant to the U.S. Security and Pledge Agreement (as defined below) (the “Collateral Agent”), in favor of LONGYEAR TM, INC. (the “Grantor”). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed thereto in each Patent Security Agreement on Schedule A attached hereto as Exhibit A, Exhibit B, Exhibit C, Exhibit D, Exhibit E, Exhibit F, Exhibit G, Exhibit H, Exhibit I, Exhibit J, Exhibit K, Exhibit L, and Exhibit M (with respect to the release of the lines and security interests granted in such Patent Security Agreement), or if not defined therein, in the Security Agreement (as defined below).

WHEREAS, the Grantor was or is a party to that certain (i) Term Loan B Securities Agreement, dated as of December 31, 2018 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Term Loan A Securities Agreement”), among inter alios BL Capital Management LLC, a Delaware limited liability company (the “Issuer”), Boart Longyear Limited (ABN 49 123 52 728), a corporation incorporated under the laws of the Commonwealth of Australia (the “Group Parent”), the other parties thereto from time to time and the Collateral Agent, and (ii) U.S. Security and Pledge Agreement, dated as of December 31, 2018 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), among the Issuer, the Group Parent, the grantors party thereto (the “Guarantors”), and the Collateral Agent, pursuant to which the Grantor has executed and delivered each of the Patent Security Agreements listed on Schedule A attached hereto;

WHEREAS, pursuant to the Security Agreement and each Patent Security Agreement, Grantor pledged and granted to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under the Collateral of such Grantor, including all Patents listed in each of the Patent Security Agreements listed on Schedule A, and all Proceeds of any and all of the foregoing (the “Patent Collateral”);

WHEREAS, the Term Loan B Securities Agreement has terminated pursuant to the Secured Creditors’ Scheme of Arrangement and Unsecured Creditor’s Scheme of Arrangement approved by the Supreme Court of New South Wales in Sydney, Australia;

WHEREAS, as a result of such termination, the Grantor has requested that the Collateral Agent terminate, release and discharge fully its liens on and security interests in all right, title and interest of such Grantor in, to and under the Patent Collateral, and execute a document suitable for recording in the United States Patent and Trademark Office to evidence the release of its liens on and security interests in the Patent Collateral as herein provided.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Collateral Agent, without representation or warranty of any kind, hereby releases, relinquishes and discharges, with respect to the Grantor, all of its liens on and security interests in and to all of the Grantor’s right, title, and interest in, to and under the Patent Collateral, and re-assigns to the Grantor any and all right, title or interest it may have in such Patent Collateral for each of the Patent Security Agreements on Schedule A.

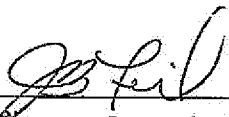
The Collateral Agent hereby authorizes the Grantor, or the Grantor’s authorized representatives, to record this Release with the United States Patent and Trademark Office and/or any other

applicable governmental office or agency. The Collateral Agent agrees to execute and deliver to the Grantor other instruments and other documents (each in such form as prepared by the Grantor and reasonably satisfactory to the Collateral Agent), and do all further acts which the Grantor (or its agents or designees) reasonably request, at the Grantor's sole cost and expense, as may be necessary to release the liens on and security interests in the Patent Collateral which had been granted under each of the Patent Security Agreements listed on Schedule A.

THIS RELEASE AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAWS PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE LAW OF THE STATE OF NEW YORK (OTHER THAN ANY MANDATORY PROVISIONS OF LAW RELATING TO THE LAW GOVERNING PERFECTION AND THE EFFECT OF PERFECTION OF THE SECURITY INTEREST).

IN WITNESS WHEREOF, the Collateral Agent has caused this Release to be duly executed by its duly authorized representatives as of the day and year first above written.

WILIMINGTON TRUST, NATIONAL
ASSOCIATION,
as Collateral Agent

By: 
Name: Joseph B. Feil
Title: Vice President

SCHEDULE A

1. Patent Security Agreement, executed on November 14, 2016, recorded with the United States Patent and Trademark Office at Reel 040319, Frame 0569 on November 15, 2016;
2. Patent Security Agreement, dated as of July 13, 2016, recorded with the United States Patent and Trademark Office at Reel 039163, Frame 0258 on July 15, 2016;
3. Patent Security Agreement, dated as of April 26, 2017, recorded with the United States Patent and Trademark Office at Reel 042995, Frame 0134 on July 13, 2017;
4. Patent Security Agreement, dated as of December 13, 2017, recorded with the United States Patent and Trademark Office at Reel 044392, Frame 0550 on December 14, 2017;
5. Patent Security Agreement, dated as of April 30, 2018, recorded with the United States Patent and Trademark Office at Reel 046041, Frame 0210 on May 1, 2018;
6. Patent Security Agreement, dated as of September 19, 2018, recorded with the United States Patent and Trademark Office at Reel 047113, Frame 0132 on September 20, 2018;
7. Patent Security Agreement, dated as of December 31, 2018, recorded with the United States Patent and Trademark Office at Reel 047995, Frame 0475 on December 31, 2018;
8. Patent Security Agreement, dated as of May 14, 2019, recorded with the United States Patent and Trademark Office at Reel 049176, Frame 0402 on May 14, 2019;
9. Patent Security Agreement, dated as of November 14, 2019, recorded with the United States Patent and Trademark Office at Reel 051061, Frame 0747 on November 20, 2019;
10. Patent Security Agreement, dated as of April 29, 2020, recorded with the United States Patent and Trademark Office at Reel 052529, Frame 0876 on April 29, 2020;
11. Patent Security Agreement, dated as of August 11, 2020, recorded with the United States Patent and Trademark Office at Reel 053467, Frame 0200 on August 12, 2020;
12. Patent Security Agreement, dated as of February 5, 2021, recorded with the United States Patent and Trademark Office at Reel 055231, Frame 0124 on February 5, 2021; and
13. Patent Security Agreement, dated as of April 28, 2021, recorded with the United States Patent and Trademark Office at Reel 056084, Frame 0636 on April 29, 2021;

Exhibit A

Patent Security Agreement, executed on November 14, 2016

(Reel 040319, Frame 0569)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4142376

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	11/14/2016
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	50 SOUTH SIXTH ST., SUITE 1290
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402
PROPERTY NUMBERS Total: 7	
Property Type	Number
Patent Number:	9399898
Patent Number:	9404311
Patent Number:	9421671
Patent Number:	9446503
Application Number:	15232452
Application Number:	15303668
PCT Number:	US1653703
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST., SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00050
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	11/15/2016

PATENT

Total Attachments: 4

source=Nov. 14. 2016 - Longyear TM Inc - Wilmington Trust Loan B - US Patent Security Agreement#page1.tif

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source=Nov. 14. 2016 - Longyear TM Inc - Wilmington Trust Loan B - US Patent Security Agreement#page3.tif

source=Nov. 14. 2016 - Longyear TM Inc - Wilmington Trust Loan B - US Patent Security Agreement#page4.tif

Patent Security Agreement

This Patent Security Agreement, dated as of _____, 2016, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of the Grantor (other than Excluded Assets), which shall include:

- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.


SECTION 5. Subject to Intercreditor Agreement. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By:



Name: Fabrizio R. Rasetti

Title: President

[Signature Page to Patent Security Agreement Term Loan B]

9249272v1 19133.00050

PATENT
REEL: 050670 FRAME: 0672

Schedule I

Patents

<u>Patent No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Issue Date</u>
9,399,898	US	Core Drilling Tools with Retractable Lockable Driven Latch Mechanisms	Longyear TM, Inc.	26-Jul-16
9,404,311	US	Fiber-Containing Diamond-Impregnated Cutting Tools And Methods Of Forming And Using Same	Longyear TM, Inc.	02-Aug-16
9,421,671	US	Infiltrated Diamond Wear Resistant Bodies and Tools	Longyear TM, Inc.	23-Aug-16
9,446,503	US	High-Strength, High-Hardness Binders and Drilling Tools Formed Using the Same	Longyear TM, Inc.	20-Sep-16

Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
15/232,452	US	Infiltrated Diamond Wear Resistant Bodies and Tools	Longyear TM, Inc	09-Aug-16
15/303,668	US	Drill Bits Having Flushing	Longyear TM, Inc	12-Oct-16

PCT Patent Applications

<u>Patent Serial No.</u>	<u>PCT Filing Date</u>	<u>Title</u>	<u>Owner</u>	<u>30 Mo. Natl Date</u>
PCT/US2016/53703	09/26/16	Braking Devices for Drilling Operations and Systems and Methods of Using Same	Longyear TM, Inc	03/30/18

[Signature Page to Patent Security Agreement Term Loan B]

9249272v1 19133.00050

Exhibit B

Patent Security Agreement, dated as of July 13, 2016

(Reel 039163, Frame 0258)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3963178

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	07/13/2016
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	SUITE 1290, 50 SOUTH SIXTH STREET
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402
PROPERTY NUMBERS Total: 10	
Property Type	Number
Patent Number:	9234399
Application Number:	14585736
Application Number:	14585716
Application Number:	14584877
Application Number:	14566389
Application Number:	14500012
Application Number:	14870247
Application Number:	14876501
Application Number:	14993550
Application Number:	15010672
CORRESPONDENCE DATA	
Fax Number:	(704)377-8156
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@rbh.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON STREET, SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW AND HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00049

PATENT

REEL: 057676 FRAME: 0075

NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	07/15/2016
Total Attachments: 5 source=Longyear TM, Inc. Patent Security Agmt. Wilmington Trust Term LoanA_07.13.2016#page1.tif source=Longyear TM, Inc. Patent Security Agmt. Wilmington Trust Term LoanA_07.13.2016#page2.tif source=Longyear TM, Inc. Patent Security Agmt. Wilmington Trust Term LoanA_07.13.2016#page3.tif source=Longyear TM, Inc. Patent Security Agmt. Wilmington Trust Term LoanA_07.13.2016#page4.tif source=Longyear TM, Inc. Patent Security Agmt. Wilmington Trust Term LoanA_07.13.2016#page5.tif	

Patent Security Agreement

This Patent Security Agreement, dated as of July 13, 2016, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan A Securities Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan A Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of the Grantor (other than Excluded Assets), which shall include:

- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 5. Subject to Intercreditor Agreement. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By: 
Name: Fabrizio R. Rasetti
Title: President

[Signature Page to Patent Security Agreement Term Loan A]

8853762v1 19133.00050

PATENT
REEL: 057676 FRAME: 0079

Schedule I

Issued Patents

Title	Country	Patent No.	Issue Date	Owner
Impregnated drill bits with integrated reamers	U.S.	9234399	12-Jan-2016	Longyear TM, Inc.

Patent Applications

Title	Country	Application No.	Filing Date	Owner
Diverter assemblies and systems for forming seals around pipe elements and methods of using same	U.S.	14/585736	30-Dec-2014	Longyear TM, Inc.
No-waterway or single waterway drill bits and systems and methods for using same	U.S.	14/585716	30-Dec-2014	Longyear TM, Inc.
Drill rod handling system for moving drill rods to and from an operative position	U.S.	14/584877	29-Dec-2014	BLY IP Inc.
High-strength, high-hardness binders and drilling tools formed using the same	U.S.	14/566389	10-Dec-2014	Longyear TM, Inc.
Core drilling tools with external fluid pathways	U.S.	14/500012	29-Sep-2014	Longyear TM, Inc.
Braking devices for drilling operations and systems and methods of using same	U.S.	14/870247	30-Sep-2015	Longyear TM, Inc.
Drill string components having multiple-thread joints	U.S.	14/876501	06-Oct-2015	BLY IP Inc.

[Signature Page to Patent Security Agreement Term Loan A]

8853762v1 19133.00050

PATENT
REEL: 057676 FRAME: 0080

Title	Country	Application No.	Filing Date	Owner
Drilling tools having matrices with carbide-forming alloys and methods of making and using same	U.S.	14/993550	12-Jan-2016	Longyear TM, Inc.
Drill bits having flushing and systems for using same	U.S.	15/010672	29-Jan-2016	Longyear TM, Inc.

8853762v1 19133.00050

Exhibit C

Patent Security Agreement, dated as of April 26, 2017

(Reel 042995, Frame 0134)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4501852

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
LONGYEAR TM, INC.	04/26/2017

RECEIVING PARTY DATA

Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	50 SOUTH SIXTH ST., SUITE 1290
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402

PROPERTY NUMBERS Total: 15

Property Type	Number
Patent Number:	9399898
Patent Number:	9404311
Patent Number:	9421671
Patent Number:	9446503
Patent Number:	9500036
Patent Number:	9506298
Patent Number:	9528337
Application Number:	15232452
Application Number:	15303668
Application Number:	15311592
Application Number:	15378992
Application Number:	15379016
Application Number:	62358652
Application Number:	62425230
PCT Number:	US2016053703

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 7043778156

Email: jcarusone@robinsonbradshaw.com
Correspondent Name: JENNIFER CARUSONE
Address Line 1: 101 N. TRYON ST., SUITE 1900
Address Line 2: ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4: CHARLOTTE, NORTH CAROLINA 28246

ATTORNEY DOCKET NUMBER: 19133.00050 TERM LOAN B

NAME OF SUBMITTER: JENNIFER CARUSONE

SIGNATURE: /Jennifer Carusone/

DATE SIGNED: 07/13/2017

Total Attachments: 5

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source=April 2017 Wilmington Trust Term Loan B Patent Security Interest#page4.tif

source=April 2017 Wilmington Trust Term Loan B Patent Security Interest#page5.tif

Patent Security Agreement

This Patent Security Agreement, dated as of April 26, 2017, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of the Grantor (other than Excluded Assets), which shall include:

- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

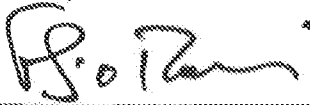
SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 5. Subject to Intercreditor Agreement. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By: 

Name: Fabrizio Rasetti

Title: President

[Signature Page to Patent Security Agreement Term Loan B]

Schedule I

Patents

<u>Patent No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Issue Date</u>
9,399,898	US	Core Drilling Tools with Retractable Lockable Driven Latch Mechanisms	Longyear TM, Inc.	26-Jul-16
9,404,311	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods for Forming and Using Same	Longyear TM, Inc.	02-Aug-16
9,421,671	US	Infiltrated Diamond Wear Resistant Bodies and Tools	Longyear TM, Inc.	23-Aug-16
9,446,503	US	High Strength, High Hardness Binders and Drilling Tools Formed from Using the Same	Longyear TM, Inc.	20-Sep-16
9,500,036	US	Single-Waterway Drill Bits and Systems for Using Same	Longyear TM, Inc.	22-Nov-16
9,506,298	US	Drill Bits Having Blind-Hole Flushing and System for Using Same	Longyear TM, Inc.	29-Nov-16
9,528,337	US	Up Hole Bushing and Core Barrel Head Assembly Comprising Same	Longyear TM, Inc.	27-Dec-16

Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
15/232,452	US	Infiltrated Diamond Wear Resistant Bodies and Tools	Longyear TM, Inc.	09-Aug-16
15/303,668	US	Drill Bits Having Flushing	Longyear TM, Inc.	12-Oct-16
15/311,592	US	Wireline System and Methods of Using Same	Longyear TM, Inc.	16-Nov-16
15/378,992	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods for Forming and Using Same	Longyear TM, Inc.	14-Dec-16

15/379,016	US	Handling and Recovery Devices for Tubular Members and Associated Methods	Longyear TM, Inc	14-Dec-16
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Provisional Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
62/358,652	US	Core Tube Handling System and Method for Using the Same	Longyear TM, Inc.	06-Jul-16
62/425,230	US	Wireless Data Acquisition Adapter for Drilling String Impulse Sensing	Longyear TM, Inc.	22-Nov-16

PCT Patent Applications

<u>Patent Serial No.</u>	<u>PCT Filing Date</u>	<u>Title</u>	<u>Owner</u>	<u>30 Mo. Natl Date</u>
PCT/US2016/53703	09/26/16	Braking Devices for Drilling Operations and Systems and Methods of Using the Same	Longyear TM, Inc.	03/30/18

Exhibit D

Patent Security Agreement, dated as of December 13, 2017

(Reel 044392, Frame 0550)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4733754

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	12/13/2017
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	50 SOUTH SIXTH ST., SUITE 1290
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	9689222
Application Number:	15544741
CORRESPONDENCE DATA	
Fax Number:	(704)377-8156
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON STREET, SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00052 TERM LOAN B
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	12/14/2017
Total Attachments: 4	
source=Wilmington Term Loan B - U.S. Patent Security Agreement#page1.tif	
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source=Wilmington Term Loan B - U.S. Patent Security Agreement#page3.tif	
source=Wilmington Term Loan B - U.S. Patent Security Agreement#page4.tif	

Patent Security Agreement

This Patent Security Agreement, dated as of December 13th, 2017, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of the Grantor (other than Excluded Assets), which shall include:

- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 5. Subject to Intercreditor Agreement. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By: 
Name: Jeffrey Olsen
Title: Secretary

**Schedule I
to
PATENT SECURITY AGREEMENT**

PATENT REGISTRATIONS AND PATENT APPLICATIONS

Patents

<u>Patent No.</u>	<u>Country</u>	<u>Title</u>	<u>Serial No.</u>	<u>Owner</u>	<u>Issue Date</u>
9,689,222	US	Core Drilling Tools with External Fluid Pathways	14/500,012	Longyear TM, Inc.	27-Jun-17

Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
15/544,741	US	Fluid Control Assemblies and Core Barrel and Overshot Assemblies Comprising Same	Longyear TM, Inc.	19-Jul-17

Provisional Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
None.				

PCT Patent Applications

<u>Patent Serial No.</u>	<u>PCT Filing Date</u>	<u>Title</u>	<u>Owner</u>	<u>30 Mo. Natl Date</u>
None.				

Exhibit E

Patent Security Agreement, dated as of April 30, 2018

(Reel 046041, Frame 0210)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4939707

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST (TERM LOAN B)
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	04/30/2018
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	50 SOUTH SIXTH ST., SUITE 1290
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	9784038
Patent Number:	9903165
CORRESPONDENCE DATA	
Fax Number:	(704)378-4000
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON STREET, SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00049
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	05/01/2018
Total Attachments: 4	
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2018#page3.tif

source=10791600_v1_Longyear TM Inc. - Wilmington Trust Loan B - US Patent Security Agreement_Apr.
2018#page4.tif

Patent Security Agreement

This Patent Security Agreement, dated as of April 30, 2018, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

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- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

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[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By: 
Name: Jeffrey Olsen
Title: Secretary

**Schedule I
to
PATENT SECURITY AGREEMENT**

PATENT REGISTRATIONS AND PATENT APPLICATIONS

Patents

<u>Patent No.</u>	<u>Country</u>	<u>Title</u>	<u>Serial No.</u>	<u>Owner</u>	<u>Issue Date</u>
9,784,038	US	High-Productivity Drill Bits	14/034,605	Longyear TM, Inc.	10-Oct-17
9,903,165	US	Drill Bits with Axially-Tapered Waterways	14/753,853	Longyear TM, Inc.	27-Feb-18

Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
None.				

Provisional Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
None.				

PCT Patent Applications

<u>Patent Serial No.</u>	<u>PCT Filing Date</u>	<u>Title</u>	<u>Owner</u>	<u>30 Mo. Natl Date</u>
None.				

Exhibit F

Patent Security Agreement, dated as of September 19, 2018

(Reel 047113, Frame 0132)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5149645

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST (TERM LOAN B)
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	09/19/2018
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	50 SOUTH SIXTH ST., SUITE 1290
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55402
PROPERTY NUMBERS Total: 5	
Property Type	Number
Patent Number:	9540883
Patent Number:	9546524
Patent Number:	9637980
Application Number:	15965243
Application Number:	16017334
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	JCarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST., STE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00050 TERM LOAN B
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	09/20/2018
Total Attachments: 4	

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source=Sep. 2018_Longyear TM Inc._Wilmington Trust Term Loan B_Patent Security Agreement#page4.tif

Patent Security Agreement

This Patent Security Agreement, dated as of September 19, 2018, is made by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated as of October 22, 2014 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of the Grantor (other than Excluded Assets), which shall include:

- (a) all Patents listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

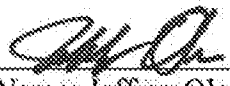
SECTION 5. Subject to Intercreditor Agreement. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of

any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Longyear TM, Inc.

By:  _____
Name: Jeffrey Olsen
Title: Secretary

Schedule I
to
PATENT SECURITY AGREEMENT

PATENT REGISTRATIONS AND PATENT APPLICATIONS

Patents

<u>Patent No.</u>	<u>Country</u>	<u>Title</u>	<u>Serial No.</u>	<u>Owner</u>	<u>Issue Date</u>
9,540,883	U.S.	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods of Forming and Using Same		Longyear TM, Inc.	01-Jan-17
9,546,524	U.S.	Handling And Recovery Devices For Tubular Members And Associated Methods		Longyear TM, Inc.	01-Jan-17
9,637,980	U.S.	Diamond Impregnated Bit With Aggressive Face Profile		Longyear TM, Inc.	02-May-17

Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
15/965,243	U.S.	No-Waterway of Single Waterway Drill Bits and Systems and Methods for Using Same	Longyear TM, Inc.	27-Apr-18
16/017,334	U.S.	Core Barrel Head Assembly with an Integrated Sample Orientation Tool and System for Using Same	Longyear TM, Inc. and Globaltech	25-Jun-18

Provisional Patent Applications

<u>Patent Serial No.</u>	<u>Country</u>	<u>Title</u>	<u>Owner</u>	<u>Application Filing Date</u>
None.				

PCT Patent Applications

<u>Patent Serial No.</u>	<u>PCT Filing Date</u>	<u>Title</u>	<u>Owner</u>	<u>30 Mo. Natl Date</u>
None.				

Exhibit G

Patent Security Agreement, dated as of December 31, 2018

(Reel 047995, Frame 0475)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5304047

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
SEQUENCE:	2

CONVEYING PARTY DATA

Name	Execution Date
LONGYEAR TM, INC.	12/31/2018

RECEIVING PARTY DATA

Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890

PROPERTY NUMBERS Total: 97

Property Type	Number
Patent Number:	7967085
Patent Number:	10053973
Patent Number:	7997167
Patent Number:	8051925
Patent Number:	D643859
Patent Number:	10047581
Patent Number:	D644668
Patent Number:	D649167
Patent Number:	9089904
Patent Number:	D664567
Patent Number:	D643443
Patent Number:	D664566
Patent Number:	D647540
Patent Number:	8261857
Patent Number:	7628228
Patent Number:	8051929
Patent Number:	8869918
Patent Number:	9689222
Patent Number:	8485280

PATENT

Property Type	Number
Patent Number:	9234398
Patent Number:	9399898
Patent Number:	9051786
Patent Number:	9637980
Patent Number:	D630656
Patent Number:	D647115
Patent Number:	8459381
Patent Number:	9074429
Patent Number:	D647114
Patent Number:	D622745
Patent Number:	9506298
Patent Number:	10077609
Patent Number:	9279292
Patent Number:	9903165
Patent Number:	7828090
Patent Number:	7874384
Patent Number:	6634443
Patent Number:	7779932
Patent Number:	8794355
Patent Number:	9328608
Patent Number:	8146686
Patent Number:	7695542
Patent Number:	8783384
Patent Number:	9404311
Patent Number:	9540883
Patent Number:	9546524
Patent Number:	8006783
Patent Number:	8333255
Patent Number:	9359847
Patent Number:	9784038
Patent Number:	9446503
Patent Number:	8118113
Patent Number:	8590646
Patent Number:	8991524
Patent Number:	9234399
Patent Number:	9267332
Patent Number:	9421671
Patent Number:	8474547

Property Type	Number
Patent Number:	7921926
Patent Number:	D687862
Patent Number:	D687863
Patent Number:	D687864
Patent Number:	8770322
Patent Number:	8051924
Patent Number:	8191445
Patent Number:	8356677
Patent Number:	7770668
Patent Number:	8118118
Patent Number:	7997351
Patent Number:	8770319
Patent Number:	D650052
Patent Number:	D649228
Patent Number:	D648836
Patent Number:	9500036
Patent Number:	7984773
Patent Number:	8336647
Patent Number:	8006782
Patent Number:	8668029
Patent Number:	D622293
Patent Number:	D622741
Patent Number:	D622294
Patent Number:	D624564
Patent Number:	9121236
Patent Number:	9528337
Patent Number:	6425449
Patent Number:	8028613
Patent Number:	8347984
Application Number:	14993550
Application Number:	14790069
Application Number:	14585736
Application Number:	15544741
Application Number:	15379016
Application Number:	15378992
Application Number:	15311592
Application Number:	16035776
Application Number:	16017334

Property Type	Number
Application Number:	15010672
Application Number:	15232452

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 7043778156
Email: jcarusone@robinsonbradshaw.com
Correspondent Name: JENNIFER CARUSONE
Address Line 1: 101 N. TRYON ST., SUITE 1900
Address Line 2: ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4: CHARLOTTE, NORTH CAROLINA 28246

ATTORNEY DOCKET NUMBER:	19133.00054
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	12/31/2018

Total Attachments: 9

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Patent Security Agreement

Patent Security Agreement, dated as of December 31, 2018, by Longyear TM, Inc. (the “Grantor”), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the “Collateral Agent”).

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement of even date herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”) in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (other than Excluded Assets):

- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National

Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

GRANTOR:

LONGYEAR TM, INC.,

By: 

Name: Robert Closner

Title: President

Schedule I

Patents

Patent No.	Country	Title	Serial No.	Owner	Issue Date
7,967,085	US	Braking Devices And Methods For Use In Drilling Operations	12/427,586	Longyear TM, Inc.	28-Jun-11
10,053,973	US	Braking Devices for Drilling Operations and Systems and Methods of Using Same	14/870,247	Longyear TM, Inc.	21-Aug-18
7,997,167	US	Clamping And Breaking Device	12/197,817	Longyear TM, Inc.	16-Aug-11
8,051,925	US	Core Barrel Assemblies with Braking Devices	13/094,581	Longyear TM, Inc.	8-Nov-11
D643,859	US	Core Barrel Assembly with Tapered Design	29/383,561	Longyear TM, Inc.	23-Aug-11
10,047,581	US	Core Barrel Head Assembly with an Integrated Sample Orientation Tool and System for Using Same	14/692,484	Longyear TM, Inc. and Globaltech	14-Aug-18
D644,668	US	CORE BARREL HEAD ASSEMBLY WITH AXIAL GROOVE	29/383,340	Longyear TM, Inc.	6-Sep-11
D649,167	US	Core Barrel Head Assembly with Tapered Design	29/383,554	Longyear TM, Inc.	22-Nov-11
9,089,904	US	Core Barrel Holder and Methods of Using Same	13/666,059	Longyear TM, Inc.	28-Jul-15
D664,567	US	Core Barrel Latch Body	29/384,681	Longyear TM, Inc.	31-Jul-12
D643,443	US	Core Barrel Latch Body with Axial Grooves	29/383,572	Longyear TM, Inc.	16-Aug-11
D664,566	US	Core Barrel Retracting Case	29/384,675	Longyear TM, Inc.	31-Jul-12
D647,540	US	Core Barrel Sleeve with Axial Grooves	29/383,623	Longyear TM, Inc.	25-Oct-11
8,261,857	US	Core Barrel Sonic Latch Mechanism and Methods of Sonic Drilling Using Same	12/346,147	Longyear TM, Inc.	11-Sep-12
7,628,228	US	Core Drill Bit With Extended Crown Height	11/610,680	Longyear TM, Inc.	8-Dec-09
8,051,929	US	Core Drill Bits With Enclosed Fluid Slots	12/909,187	Longyear TM, Inc.	8-Nov-11
8,869,918	US	Core Drilling Tools With External Fluid Pathways	12/968994	Longyear TM, Inc.	28-Oct-14
9,689,222	US	Core Drilling Tools with External Fluid Pathways	14/500,012	Longyear TM, Inc.	27-Jun-17

Patent No.	Country	Title	Serial No.	Owner	Issue Date
8,485,280	US	Core Drilling Tools with Retractable Lockable Driven Latch Mechanisms	12/968,127	Longyear TM, Inc.	16-Jul-13
9,234,398	US	Core Drilling Tools with Retractable Lockable Driven Latch Mechanisms	13/943,460	Longyear TM, Inc.	12-Jan-16
9,399,898	US	Core Drilling Tools with Retractable Lockable Driven Latch Mechanisms	14/193,136	Longyear TM, Inc.	26-Jul-16
9,051,786	US	Diamond Impregnated Bit With Aggressive Face Profile	12/857,331	Longyear TM, Inc.	9-Jun-15
9,637,980	US	Diamond Impregnated bit with Aggressive Face Profile	14/731,634	Longyear TM, Inc.	02-May-17
D630,656	US	Drill Bit	29/354,596	Longyear TM, Inc.	11-Jan-11
D647,115	US	Drill Bit Waterway	29/354,592	Longyear TM, Inc.	18-Oct-11
8,459,381	US	Drill Bit With Axially-Tapered Waterways	12/638,229	Longyear TM, Inc.	11-Jun-13
9,074,429	US	Drill Bit With Axially-Tapered Waterways	13/914,233	Longyear TM, Inc.	7-Jul-15
D647,114	US	Drill Bit With Tapered Waterway	29/354,586	Longyear TM, Inc.	18-Oct-11
D622,745	US	Drill Bit With Tapered Waterway	29/354,579	Longyear TM, Inc.	31-Aug-10
9,506,298	US	Drill Bits Having Blind-Hole Flushing and System for Using Same	14/085,218	Longyear TM, Inc.	29-Nov-16
10,077,609	US	Drill Bits Having Flushing	15/303,668	Longyear TM, Inc.	18-Sept-19
9,279,292	US	Drill Bits Having Flushing and Systems for Using Same	14/085,242	Longyear TM, Inc.	8-Mar-16
9,903,165	US	Drill Bits With Axially-Tapered Waterways	14/753,853	Longyear TM, Inc.	27-Feb-18
7,828,090	US	Drill Bits with Enclosed Fluid Slots and Internal Flutes	12/564,540	Longyear TM, Inc.	9-Nov-10
7,874,384	US	Drill Bits with Increased Crown Height	12/568,231	Longyear TM, Inc.	25-Jan-11
6,634,443	US	Drill Rod Handling Device	10/009,255	Longyear TM, Inc.	21-Oct-03
7,779,932	US	Drill-String Shock Absorbers	12/253,082	Longyear TM, Inc.	24-Aug-10
8,794,355	US	Driven Latch Mechanism	12/898,878	Longyear TM, Inc.	5-Aug-14

Patent No.	Country	Title	Serial No.	Owner	Issue Date
9,328,608	US	Driven Latch Mechanism	14/341,128	Longyear TM, Inc.	03-May-16
8,146,686	US	Fiber-Containing Cutting Tools	12/561,936	Longyear TM, Inc.	3-Apr-12
7,695,542	US	Fiber-Containing Diamond-Impregnated Cutting Tools	11/948,185	Longyear TM, Inc.	13-Apr-10
8,783,384	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods of Forming and Using Same	13/477,989	Longyear TM, Inc.	22-Jul-14
9,404,311	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods of Forming and Using Same	14/319,763	Longyear TM, Inc.	02-Aug-16
9,540,883	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods of Forming and Using Same	14/229,387	Longyear TM, Inc.	10-Jan-17
9,546,524	US	Handling & Recovery Devices for Tubular Members and Associated Methods	14/192,569	Longyear TM, Inc.	17-Jan-17
8,006,783	US	Helical Drilling Apparatus, Systems, and Methods	12/732,106	Longyear TM, Inc.	30-Aug-11
8,333,255	US	High Productivity Core Drilling System	12/528,949	Longyear TM, Inc.	18-Dec-12
9,359,847	US	High Productivity Core Drilling System	13/717,421	Longyear TM, Inc.	07-Jun-16
9,784,038	US	High Productivity Drill Bits	14/034,605	Longyear TM, Inc.	10-Oct-17
9,446,503	US	High Strength, High Hardness Binders and Drilling Tools Formed from Using the Same	14/566,389	Longyear TM, Inc.	20-Sep-16
8,118,113	US	Hydraulic Control System For Drilling Systems	12/412,156	Longyear TM, Inc.	21-Feb-12
8,590,646	US	Impregnated Cutting Elements with Large Abrasive Cutting Media and Methods of Making and Using the Same	12/885,284	Longyear TM, Inc.	26-Nov-13
8,991,524	US	Impregnated Drill Bits with Integrated Reamers	13/177,427	Longyear TM, Inc.	31-Mar-15
9,234,399	US	Impregnated Drill Bits with Integrated Reamers	14/669,897	Longyear TM, Inc.	12-Jan-16
9,267,332	US	Impregnated Drilling Tools Including Elongated Structures	13/217,107	Longyear TM, Inc.	23-Feb-16

Patent No.	Country	Title	Serial No.	Owner	Issue Date
9,421,671	US	Infiltrated Diamond Wear Resistant Bodies and Tools	13/368,928	Longyear TM, Inc.	23-Aug-16
8,474,547	US	Isolation System For Drilling Systems	12/251,120	Longyear TM, Inc.	2-Jul-13
7,921,926	US	Jointed Spearhead Assembly	12/349,431	Longyear TM, Inc.	12-Apr-11
D687,862	US	Latch Body	29/430,535	Longyear TM, Inc.	13-Aug-13
D687,863	US	Latch Body	29/430,541	Longyear TM, Inc.	13-Aug-13
D687,864	US	Latch Body	29/430,543	Longyear TM, Inc.	13-Aug-13
8,770,322	US	Latch Body Components Having Multiple Functions, and Drilling Head Assembly Incorporating Same	13/593,338	Longyear TM, Inc.	8-Jul-14
8,051,924	US	Methods of Braking Core Barrel Assemblies	13/094,674	Longyear TM, Inc.	8-Nov-11
8,191,445	US	Methods of Forming Fiber-Containing Diamond-Impregnated Cutting Tools	12/276,903	Longyear TM, Inc.	5-Jun-12
8,356,677	US	Methods of Preloading a Sonic Drill Head and Methods of Drilling Using the Same	13/172,450	Longyear TM, Inc.	22-Jan-13
7,770,668	US	Modular Rotary Drill Head	12/239,468	Longyear TM, Inc.	10-Aug-10
8,118,118	US	Modular Rotary Drill Head	12/843,727	Longyear TM, Inc.	21-Feb-12
7,997,351	US	Pneumatic Drifter With Replaceable Foot Pieces	12/337,510	Longyear TM, Inc.	16-Aug-11
8,770,319	US	Pump-In Seal	12/893,234	Longyear TM, Inc.	8-Jul-14
D650,052	US	Seal For Head Assembly	29/381,037	Longyear TM, Inc.	6-Dec-11
D649,228	US	Seal For Head Assembly	29/378,942	Longyear TM, Inc.	22-Nov-11
D648,836	US	Seal For Head Assembly	29/378,943	Longyear TM, Inc.	15-Nov-11
9,500,036	US	Single-Waterway Drill Bits and Systems for Using Same	14/246,888	Longyear TM, Inc.	22-Nov-16
7,984,773	US	Sonic Drill Bit for Core Sampling	12/346,395	Longyear TM, Inc.	26-Jul-11
8,336,647	US	Sonic Drill Bits and Sonic Drilling System	13/046,548	Longyear TM, Inc.	25-Dec-12

Patent No.	Country	Title	Serial No.	Owner	Issue Date
8,006,782	US	Sonic Drill Head	12/250,894	Longyear TM, Inc.	30-Aug-11
8,668,029	US	Sonic Latch Mechanism	13/610,683	Longyear TM, Inc.	11-Mar-14
D622,293	US	Spearhead	29/352,055	Longyear TM, Inc.	24-Aug-10
D622,741	US	Spearhead	29/352,115	Longyear TM, Inc.	31-Aug-10
D622,294	US	Spearhead Base	29/352,117	Longyear TM, Inc.	24-Aug-10
D624,564	US	Spearhead Base	29/352,049	Longyear TM, Inc.	28-Sep-10
9,121,236	US	Storage, Handling and Positioning Device for Drill Rods and Methods Thereof	13/730,194	Longyear TM, Inc.	1-Sep-15
9,528,337	US	Up Hole Bushing and Core Barrel Head Assembly Comprising Same	13/803,820	Longyear TM, Inc.	27-Dec-16
6,425,449	US	Up-Hole Pump-In Core Barrel Apparatus	09/779,258	Longyear TM, Inc.	30-Jul-02
8,028,613	US	Valve System for Drilling Systems	12/768,066	Longyear TM, Inc.	4-Oct-11
8,347,984	US	Variable Force/Variable Frequency Sonic Drill Head	12/768,390	Longyear TM, Inc.	8-Jan-13

Patent Applications

Patent Serial No.	Country	Title	Owner	Application Filing Date
14/993,550	US	Drilling Tools Having Matrices with Carbide-Forming Alloys and Methods of Making and Using Same	Longyear TM, Inc.	12-Jan-16
14/790,069	US	Core Barrel Support System and Methods of Using Same	Longyear TM, Inc.	2-Jul-15
14/585,736	US	Diverter Assemblies And Systems For Forming Seals Around Pipe Elements And Methods of Using Same	Longyear TM, Inc.	30-Dec-14
15/544,741	US	Fluid Control Assemblies and Core Barrel and Overshot Assemblies Comprising Same	Longyear TM, Inc.	19-Jul-17
15/379,016	US	Handling & Recovery Devices for Tubular Members and Associated	Longyear TM, Inc.	14-Dec-16

Patent Serial No.	Country	Title	Owner	Application Filing Date
		Methods		
15/378,992	US	Fiber-Containing Diamond-Impregnated Cutting Tools and Methods of Forming and Using Same	Longyear TM, Inc.	14-Dec-16
15/311,592	US	Wireline System and Methods of Using Same	Longyear TM, Inc.	16-Nov-16
16/035,776	US	Braking Devices for Drilling Operations and Systems and Methods of Using Same	Longyear TM, Inc	16-Jul-18
16/017,334	US	Core Barrel Head Assembly with an Integrated Sample Orientation Tool and System for Using Same	Longyear TM, Inc. and Globaltech	25-Jun-18
15/010,672	US	Drill Bits Having Flushing And Systems For Using Same	Longyear TM, Inc.	29-Jan-16
15/232,452	US	Infiltrated Diamond Wear Resistant Bodies And Tools	Longyear TM, Inc.	8-Sep-16

Exhibit H

Patent Security Agreement, dated as of May 14, 2019

(Reel 049176, Frame 0402)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5522668

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	05/14/2019
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16151871
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST., SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00054
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	05/14/2019
Total Attachments: 4	
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Patent Security Agreement

Patent Security Agreement, dated as of May 14, 2019, by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (other than Excluded Assets):

- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of

any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By: 
Name: Jeffrey Olsen
Title: Secretary

Schedule I

Patents

None.

Patent Applications

Patent Application No.	Country	Title	Owner	Filing Date
16/151,871	US	HANDLING AND RECOVERY DEVICES FOR TUBULAR MEMBERS AND ASSOCIATED METHODS	Longyear TM, Inc.	Oct. 4, 2018

Provisional Applications

None.

PCT Applications

None.

Exhibit I

Patent Security Agreement, dated as of November 14, 2019

(Reel 051061, Frame 0747)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5829638

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST - TERM LOAN B
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	11/14/2019
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	10384907
Application Number:	16506444
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON STREET, SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00049
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	11/20/2019
Total Attachments: 4	
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Patent Security Agreement

Patent Security Agreement, dated as of November 14, 2019, by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

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- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

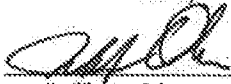
SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National

Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By: 
Name: Jeffrey Olsen
Title: Secretary

Schedule I

Patents

Patent No.	Country	Title	Owner	Issue Date
10,384,907	US	WIRELINE SYSTEM AND METHODS OF USING SAME	Longyear TM, Inc.	Aug. 20, 2019

Patent Applications

Patent Application No.	Country	Title	Owner	Filing Date
16/506,444	US	WIRELINE SYSTEM AND METHODS OF USING SAME	Longyear TM, Inc.	July 9, 2019

Provisional Applications

None.

PCT Applications

None.

Exhibit J

Patent Security Agreement, dated as of April 29, 2020

(Reel 052529, Frame 0876)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6084090

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST - TERM LOAN B
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	04/29/2020
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16588026
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON STREET, SUITE 1900
Address Line 2:	ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00049
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	04/29/2020
Total Attachments: 4	
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source=Boart Longyear - Wilmington Trust TLB Patent Security Agreement (April 2020)#page3.tif	
source=Boart Longyear - Wilmington Trust TLB Patent Security Agreement (April 2020)#page4.tif	

Patent Security Agreement

Patent Security Agreement, dated as of April 29, 2020, by Longyear TM, Inc. (the “Grantor”), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the “Collateral Agent”).

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”) in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (other than Excluded Assets):

- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.


SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of

any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By:  _____
Name: Jeffrey Olsen
Title: President

Schedule I

Patents

None.

Patent Applications

Patent Application No.	Country	Title	Owner	Filing Date
16/588,026	US	Core Barrel Head Assembly with an Integrated Sample Orientation Tool and System for Using Same	Longyear TM, Inc.	Sept. 30, 2019

Provisional Applications

None.

PCT Applications

None.

Exhibit K

Patent Security Agreement, dated as of August 11, 2020

(Reel 053467, Frame 0200)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6246196

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST - TERM LOAN B
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	08/11/2020
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 4	
Property Type	Number
Patent Number:	10626684
Patent Number:	10633943
Patent Number:	10702975
Application Number:	16899236
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST., SUITE 1900
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00050
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	08/12/2020
Total Attachments: 5	
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source=TLB Patent Security Agreement (Aug. 2020)#page5.tif

Patent Security Agreement

Patent Security Agreement, dated as of August 11, 2020, by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Grantor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (other than Excluded Assets):

- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

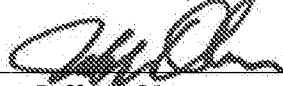
SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National

Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By:  _____

Name: Jeffrey Olsen

Title: Secretary

Schedule I

Patents

Patent No.	Patent Application No.	Country	Title	Owner	Filing Date	Issue Date
10,626,684	16/151,871	U.S.	Handling and Recovery Devices For Tubular Members an Associated Methods	Longyear TM, Inc.	October 4, 2018	April 21, 2020
10,633,943	16/035,776	U.S.	Braking Devices For Drilling Operations, and Systems and Methods For Using Same	Longyear TM, Inc.	July 16, 2018	April 28, 2020
10,702,975	14/993,550	U.S.	Drilling Tools Having Matrices With Carbide-Forming Alloys, And Methods Of Making And Using Same	Longyear TM, Inc.	January 12, 2016	July 7, 2020

Patent Applications

Patent Application No.	Country	Title	Owner	Filing Date
16/899,236	US	Drilling Tools Having Matrices With Carbide-Forming Alloys and Methods of Making and Using Same	Longyear TM, Inc.	June 11, 2020

Provisional Applications

None.

PCT Applications

None.

Exhibit L

Patent Security Agreement, dated as of February 5, 2021

(Reel 055231, Frame 0124)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6537596

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST - TERM LOAN B
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	02/05/2021
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	17082877
Patent Number:	10830013
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST. SUITE 1900
Address Line 2:	C/O ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
ATTORNEY DOCKET NUMBER:	19133.00054
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	02/05/2021
Total Attachments: 4	
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Patent Security Agreement

Patent Security Agreement, dated as of February 5, 2021, by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Term Loan B Securities Agreement, the Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

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- (a) Patents of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing.

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Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By: 
Name: Jeffrey Olsen
Title: Secretary

Schedule I

Patents

Patent No.	Patent Application No.	Country	Title	Owner	Filing Date	Issue Date
10,830,013	16/588,026	U.S.	Core Barrel Head Assembly with an Integrated Sample Orientation tool and System for Using Same	Longyear TM, Inc.	Sept. 30, 2019	Nov. 10, 2020

Patent Applications

Patent Application No.	Country	Title	Owner	Filing Date
17/082,877	US	Core Barrel Head Assembly with an Integrated Sample Orientation Tool and System for Using Same	Longyear TM, Inc. and Globaltech	Oct. 28, 2020

Provisional Applications

None.

PCT Applications

None.

Exhibit M

Patent Security Agreement, dated as of April 28, 2021

(Reel 056084, Frame 0636)

[Attached]

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6682680

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST - TERM LOAN B
CONVEYING PARTY DATA	
Name	Execution Date
LONGYEAR TM, INC.	04/28/2021
RECEIVING PARTY DATA	
Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	1100 N. MARKET ST.
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19890
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	10919726
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	7043778156
Email:	jcarusone@robinsonbradshaw.com
Correspondent Name:	JENNIFER CARUSONE
Address Line 1:	101 N. TRYON ST. SUITE 1900
Address Line 2:	C/O ROBINSON, BRADSHAW & HINSON, P.A.
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28246
NAME OF SUBMITTER:	JENNIFER CARUSONE
SIGNATURE:	/Jennifer Carusone/
DATE SIGNED:	04/29/2021
Total Attachments: 4	
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Patent Security Agreement

Patent Security Agreement, dated as of April 28, 2021, by Longyear TM, Inc. (the "Grantor"), in favor of Wilmington Trust, National Association, in its capacity as collateral agent pursuant to the Term Loan B Securities Agreement (in such capacity, the "Collateral Agent").

W I T N E S S E T H:

WHEREAS, the Grantor is party to a U.S. Security and Pledge Agreement dated December 31, 2018 herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement;

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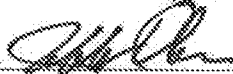
SECTION 5. Subject to Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to Wilmington Trust, National Association, as Collateral Agent, pursuant to this Patent Security Agreement and the exercise of

any right or remedy by Wilmington Trust, National Association, as Collateral Agent hereunder, are subject to the provisions of the Intercreditor Agreements (as defined in the Security Agreement). In the event of any conflict between the terms of any Intercreditor Agreement and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control.

[signature page follows]

IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

LONGYEAR TM, INC.

By: 

Name: Jeffrey Olsen

Title: President

Schedule I

Patents

Patent No.	Patent Application No.	Country	Title	Owner	Filing Date	Issue Date
10,919,726	16/506,444	USA	Wireline System and Methods of Using Same	Longyear TM, Inc.	07-09-2019	02-16-2021

Patent Applications

None.

Provisional Applications

None.

PCT Applications

None.