506338257 11/04/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6385010

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MINERP SOUTH AFRICA (PTY) LIMITED	08/27/2020

RECEIVING PARTY DATA

Name:	MINERP IP INCORPORATED	
Street Address:	333 BAY STREET	
Internal Address:	SUITE 2400	
City:	TORONTO	
State/Country:	CANADA	
Postal Code:	M5H 2T6	

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	16682331
Application Number:	15004743
Application Number:	15510271

CORRESPONDENCE DATA

Fax Number: (216)363-9001

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: 2163639000

Email: pmcadoo@faysharpe.com

Correspondent Name: FAY SHARPE LLP
Address Line 1: 1228 EUCLID AVE FL 5

Address Line 4: CLEVELAND, OHIO 44115-1834

ATTORNEY DOCKET NUMBER:	BOUW 24US01, 02 & 31US01	
NAME OF SUBMITTER:	RICHARD M. KLEIN	
SIGNATURE:	/Richard M. Klein/	
DATE SIGNED:	11/04/2020	

Total Attachments: 10

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PATENT REEL: 054273 FRAME: 0412

ASSIGNMENT

This Assignment takes effect from 17 April 2019 and is made between:

MineRP South Africa (Pty) Limited, a South African legal entity, Registration Number 2012/019140/07, of Ground Floor, 267 West Street, Centurion, 0046, South Africa ("Assignor");

and

MineRP IP Incorporated, a Canadian legal entity, Ontario Corporation Number 1136342-5, of 333 Bay Street, Suite 2400, Toronto ON M5H 2T6, Canada ("Assignee").

Assignor has agreed to assign and transfer to Assignee all right, title, and interest in the U.S. patent application listed in the following table ("the Patent Application"):

SERIAL NO.	FILING DATE	PATENT NUMBER	TITLE
15/004,743	22 Jan 2016	10,521,763	System and method for depletable, natural asset management, accounting and analysis

- 1. For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor does hereby sell, assign and transfer to Assignee, its successors, assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in and to (i) each of these patent applications, (ii) all original and reissued patents of each of these patent applications, reissues, continuations-in-part, and continuations of each of these patent applications, and (iv) all national stage and validation applications of each of these patent applications, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives, to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventor if this assignment and sale had not been made.
- 2. This assignment includes all patent applications which may claim priority to any of these patent applications, either in the U.S.A. or in any country in the world, and includes the right, where such right can be legally exercised, for Assignee in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventor could have done if the foreign application had been filed in the name of Inventor.
- 3. Assignor authorizes and requests the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is

Page 1 of 3

to issue patents on applications as aforesaid, to issue the said Letters Patent to Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights.

- 4. Assignor covenants that Assignor has the full right to convey the said entire interest herein assigned and that Assignor has not executed and will not execute any agreement in conflict herewith.
- 5. Assignor consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.
- 6. At the request of Assignee, Assignor agrees to execute all documents and do all acts as may be necessary to enable Assignee, its successors, assigns, nominees or other legal representatives, to enjoy the full benefit of the rights confirmed and assigned by this Assignment, all to be done without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.
- 7. This Assignment may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party hereto may enter into this Assignment by signing any such counterpart.

IN TESTIMONY WHEREOF the Assignor and Assignee have executed this Assignment and set their signatures on the dates indicated below.

FOR ASSIGNOR:

Signed at	CENTURION	on _	27	Agust	, 2020.
- Ang	>				
Witnesses:	D.	1_			
Printed Name	: THEODORUS +	HEMRY DO	ંપ&ક્∟ —	4	
B	3				
Printed Name	e: PETRUS JOHA	MMES S	<u></u>	BERG	

Page 2 of 3

FOR ASSIGNEE:		
Signed at CETTURION	on 27 August,	2020.
Witnesses:		
Printed Name: THEODORUS HEMR	y Doubell	
Printed Name: PETRUS JOHAMMES	STEYMBERG	

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ASSIGNMENT

This Assignment takes effect from 17 April 2019 and is made between:

MineRP South Africa (Pty) Limited, a South African legal entity, Registration Number 2012/019140/07, of Ground Floor, 267 West Street, Centurion, 0046, South Africa ("Assignor");

and

MineRP IP Incorporated, a Canadian legal entity, Ontario Corporation Number 1136342-5, of 333 Bay Street, Suite 2400, Toronto ON M5H 2T6, Canada ("Assignee").

Assignor has agreed to assign and transfer to Assignee all right, title, and interest in the U.S. patent application listed in the following table ("the Patent Application"):

SERIAL NO.	FILING DATE	PATENT NUMBER	TITLE
15/510,271	10 Mar 2017	N/A	A system and a method for life of mine planning and cost control

- 1. For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor does hereby sell, assign and transfer to Assignee, its successors, assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in and to (i) each of these patent applications, (ii) all original and reissued patents of each of these patent applications, (iii) all divisions, reissues, continuations-in-part, and continuations of each of these patent applications, and (iv) all national stage and validation applications of each of these patent applications, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives, to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventor if this assignment and sale had not been made.
- 2. This assignment includes all patent applications which may claim priority to any of these patent applications, either in the U.S.A. or in any country in the world, and includes the right, where such right can be legally exercised, for Assignee in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventor could have done if the foreign application had been filed in the name of Inventor.
- Assignor authorizes and requests the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is to issue patents on applications as aforesaid, to issue the said Letters Patent to

Page 1 of 3

Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights.

- 4. Assignor covenants that Assignor has the full right to convey the said entire interest herein assigned and that Assignor has not executed and will not execute any agreement in conflict herewith.
- 5. Assignor consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.
- 6. At the request of Assignee, Assignor agrees to execute all documents and do all acts as may be necessary to enable Assignee, its successors, assigns, nominees or other legal representatives, to enjoy the full benefit of the rights confirmed and assigned by this Assignment, all to be done without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.
- 7. This Assignment may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party hereto may enter into this Assignment by signing any such counterpart.

IN TESTIMONY WHEREOF the Assignor and Assignee have executed this Assignment and set their signatures on the dates indicated below.

FOR ASSIGNOR:

Signed at CERTURION	on 27 August	, 2020.
the		
(1)		
Witnesses:		
Printed Name: THEODORUS HER	iry Doubell	
Printed Name: PETRUS JOHANN	es sîejaberg	

FOR ASSIGNEE:

Page 2 of 3

Signed at _	CENTURION	on I August	, 2020.
Lity		_	
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Printed Nar	ne: PETRUS JOHANNE	s STETINBERS	
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MineRP South Africa (Pty) Limited, a South African legal entity, Registration Number 2012/019140/07, of Ground Floor, 267 West Street, Centurion, 0046, South Africa ("Assignor");

and

MineRP IP Incorporated, a Canadian legal entity, Ontario Corporation Number 1136342-5, of 333 Bay Street, Suite 2400, Toronto ON M5H 2T6, Canada ("Assignee").

Assignor has agreed to assign and transfer to Assignee all right, title, and interest in the U.S. patent application listed in the following table ("the Patent Application"):

SERIAL NO.	FILING DATE	PATENT NUMBER	TITLE
16/682,331	13 Nov 2019	N/A	System and a method for depletable, natural asset management, accounting and analysis

- 1. For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor does hereby sell, assign and transfer to Assignee, its successors, assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in and to (i) each of these patent applications, (ii) all original and reissued patents of each of these patent applications, (iii) all divisions, reissues, continuations-in-part, and continuations of each of these patent applications, and (iv) all national stage and validation applications of each of these patent applications, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives, to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventor if this assignment and sale had not been made.
- 2. This assignment includes all patent applications which may claim priority to any of these patent applications, either in the U.S.A. or in any country in the world, and includes the right, where such right can be legally exercised, for Assignee in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventor could have done if the foreign application had been filed in the name of Inventor.
- 3. Assignor authorizes and requests the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is

Page 1 of 3

to issue patents on applications as aforesaid, to issue the said Letters Patent to Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights.

- 4. Assignor covenants that Assignor has the full right to convey the said entire interest herein assigned and that Assignor has not executed and will not execute any agreement in conflict herewith.
- 5. Assignor consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.
- 6. At the request of Assignee, Assignor agrees to execute all documents and do all acts as may be necessary to enable Assignee, its successors, assigns, nominees or other legal representatives, to enjoy the full benefit of the rights confirmed and assigned by this Assignment, all to be done without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.
- 7. This Assignment may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party hereto may enter into this Assignment by signing any such counterpart.

IN TESTIMONY WHEREOF the Assignor and Assignee have executed this Assignment and set their signatures on the dates indicated below.

Signed at CENTURION on 27 August , 2020 Witnesses: An A A

Printed Name: THEODORUS HEAR'S DOUBELL

FOR ASSIGNOR:

Printed Name: PETRUS JOHANNES STEYMBERG

Page 2 of 3

FUR ASSIGNEE:			
Signed at CENTURION	on <u>27</u>	August	, 2020.
Witnesses:	1		
Printed Name: THEODORUS HEHR	y Doube		
Printed Name: PETRUS JOHANNES	STEUMB	. Rg	

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For reference:

The assignment document was signed on behalf of the Assignor (MineRP SA (Pty) Limited) by John Francis Megannon, Director.

The assignment document was signed on behalf of the Assignee (MineRP IP Incorporated) by Pieter Willem Nel, Director.

PATENT REEL: 054273 FRAME: 0422

RECORDED: 11/04/2020