

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6171174

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
CIRBA IP INC.	06/23/2020
RECEIVING PARTY DATA	
Name:	THE BANK OF NOVA SCOTIA
Street Address:	40 KING STREET WEST
Internal Address:	13TH FLOOR
City:	TORONTO, ONTARIO
State/Country:	CANADA
Postal Code:	M5H 1H1
PROPERTY NUMBERS Total: 14	
Property Type	Number
Patent Number:	7502713
Patent Number:	7680754
Patent Number:	7809817
Patent Number:	8065256
Patent Number:	8209687
Patent Number:	8793679
Patent Number:	8887161
Patent Number:	9600343
Patent Number:	9654367
Patent Number:	10523492
Application Number:	16687966
Application Number:	15494797
Application Number:	16774193
Application Number:	15616640
CORRESPONDENCE DATA	
Fax Number:	(312)876-7934
<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:	3128768000

Email: angelica.pogson@dentons.com
Correspondent Name: DENTONS US LLP
Address Line 1: P.O. BOX #061080
Address Line 2: WACKER DRIVE STATION, WILLIS TOWER
Address Line 4: CHICAGO, ILLINOIS 60606

NAME OF SUBMITTER: DAVID R. METZGER

SIGNATURE: /David R. Metzger/

DATE SIGNED: 06/25/2020

Total Attachments: 8

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this "Agreement") is entered into as of June 23, 2020, between **THE BANK OF NOVA SCOTIA**, a bank chartered under the Bank Act (Canada) (together with its successors and assigns, if any, "Bank"), and **CIRBA IP INC.**, an Ontario corporation ("Grantor").

RECITALS

A. Reference is made to that certain commitment letter dated June 10, 2020, together with all attached terms and conditions and schedules thereto (as amended, restated, supplemented, replaced or otherwise modified from time to time, the "Commitment Letter"), among Cirba Inc., an Ontario corporation ("Borrower"), as borrower, Grantor, Cirba (USA) Inc., a Delaware corporation, and Cirba Europe Limited, a corporation organized under the laws of the United Kingdom of Great Britain and Northern Ireland, as guarantors, and Bank, as lender. Defined terms used herein without definition shall have the meanings set forth in the Commitment Letter.

B. (i) All of the present and future indebtedness, liabilities and obligations of Grantor arising from this Agreement, the Commitment Letter or any other Credit Document, and (ii) all indebtedness, liabilities and obligations of Borrower, Grantor and each other Obligor, present and future, direct or indirect, absolute or contingent, matured or unmatured or joint or several, to Bank, including, without limitation, all such indebtedness, liabilities and obligations pursuant to or in respect of the Credit Documents, including, without limitation, in the case of each of clauses (i) and (ii), reasonable and documented attorneys' fees and expenses and any interest, fees, or expenses that accrue after the filing of an insolvency proceeding, regardless of whether allowed or allowable in whole or in part as a claim in any insolvency proceeding (collectively, the "Obligations") are secured by the assets of Grantor including, without limitation, all of Grantor's patents, trademarks, copyrights and other intellectual property.

C. Grantor's execution and delivery of this Agreement is a condition to the effectiveness of the Commitment Letter.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, Grantor and Bank hereby agree:

AGREEMENT

1. Grantor hereby unconditionally grants, collaterally assigns, and pledges to Bank to secure the Obligations, a continuing lien and security interest in Grantor's right, title, and interest in and to the following, whether now owned or hereafter acquired or arising and wherever located (collectively, the "Intellectual Property"):

- a. any and all United States of America ("United States") copyright rights, copyright applications, copyright registrations and like protections of Grantor in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret (collectively, the "Copyrights");
- b. all United States patents, patent applications and like protections of Grantor including improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same and all rights therein provided by international treaties or conventions (collectively, "Patents");

- c. any United States trademark and servicemark rights of Grantor, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business connected with and symbolized by such trademarks (collectively, the “Trademarks”) (other than any intent-to-use United States trademark application for which an amendment to allege use or statement of use has not been filed and accepted by the United States Patent and Trademark Office and that would otherwise be deemed invalidated, cancelled or abandoned due to the grant of a security interest thereon (provided that each intent-to-use application shall be considered Intellectual Property immediately and automatically upon such filing and acceptance);
- d. any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and
- e. all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

2. Grantor hereby confirms that the attached schedules of Grantor’s Copyright, Patent and Trademark applications and registrations, which are registered or filed with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, attached hereto as Exhibits A, B and C hereto, respectively, are complete and accurate as of the date hereof.

3. Grantor hereby authorizes Bank to (a) upon prior written notice from Bank to Grantor, modify this Agreement unilaterally by amending the Exhibits to this Agreement to include any Intellectual Property which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate of this Agreement containing amended exhibits reflecting such new Intellectual Property.

4. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed counterpart of a signature page of any Credit Document by electronic means shall be effective as delivery of an original executed counterpart of such Credit Document. The words “execution,” “signed,” “signature” and words of like import in any Credit Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

5. This Agreement is a Credit Document and shall be governed by, and construed in accordance with, the laws of the State of New York.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantor:

Cirba IP Inc.
179 Enterprise Boulevard, Suite 400
Markham, ON L6G 0E7
Canada
Contact: Scott Browne

GRANTOR:

CIRBA IP INC.

DocuSigned by:
Scott Browne
By: _____
Name: **SCOTT BROWNE**
Title: CFO

Address of Bank:

The Bank of Nova Scotia
13th Floor - 40 King Street West,
Toronto, Ontario
M5H 1H1
Contact: Kenneth Pham

BANK:

THE BANK OF NOVA SCOTIA

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantor:

Cirba IP Inc.
179 Enterprise Boulevard, Suite 400
Markham, ON L6G 0E7
Canada
Contact: Scott Browne

GRANTOR:

CIRBA IP INC.

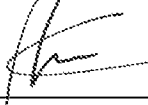
By: _____
Name: _____
Title: _____

Address of Bank:

The Bank of Nova Scotia
13th Floor - 40 King Street West,
Toronto, Ontario
M5H 1H1
Contact: Kenneth Pham

BANK:

THE BANK OF NOVA SCOTIA

By:  _____
Name: Kenneth Pham
Title: Associate Director / Principal - Technology & Innovation Banking (TIB)

By: _____
Name: _____
Title: _____

EXHIBIT A
COPYRIGHTS

None.

EXHIBIT B

PATENTS

Patent No.	Description	Status	Issue Date
US 7,502,713 B2 (Appl 11/548,938) (PCT/CA2007/001122)	Method and System for Determining Parameter Distribution, variance, Outliers and Trends in Computer Systems	Issued	Mar 10, 2009 (pr. Jun 23/06)
US 7,680,754 B2 (Appl 11/535,308) (PCT/CA2007/000675)	System and Method for Evaluating Differences in Parameters for Computer Systems using Differential Rule Definitions	Issued	Mar 16, 2010 (pr. Apr 21/06)
US 7,809,817 B2 (Appl 11/535,355) (PCT/CA2007/000675)	Method and System for Determining Compatibility of Computer Systems	Issued	Oct 5, 2010 (pr. Apr 21/06)
US 8,065,256 B2 (Appl 12/890,273) (PCT/CA2009/000387)	System and Method for Detecting System Relationships by Correlating System Workload Activity Levels	Issued	Nov 22, 2011 (pr. Mar 27/08)
US 8,209,687 B2 (Appl 12/201,323)	Method and System for Evaluating Virtualized Environments	Issued	Jun 26, 2012 (pr. Aug 31/07)
US 8,793,679 B2 (Appl 11/738,936) (PCT/CA2007/000675)	Method and System for Determining Compatibility of Computer Systems ***	Issued	Jul 29, 2014 (pr. Apr 21/06)
US 8,887,161 B2 (Appl 12/847,204) (PCT/CA2009/000164)	System and Method for Estimating Combined Workloads of Systems with Uncorrelated and Non-Deterministic Workload Patterns	Issued	Oct, 2014 (pr. Feb 13/08)
US 9,600,343 B2 (US 13/310,480) (61/419,671)	System and Method for Analyzing Computing System Resources	Issued	Mar 21, 2017 (pr. Dec 3/10)
US 9,654,367 (US 14/180,438) (PCT/CA2012/050561) (61/523,912)	System and Method for Determining and Visualizing Efficiencies and Risks in Computing Environments ***	Issued	May 16, 2017 (pr. Aug 16/11)
US 10,523,492 B2 (Appl 14/341,471) (Appl 11/738,936) (PCT/CA2007/000675)	Method and System for Determining Compatibility of Computer Systems	Issued	Dec 31, 2019 (pr. Apr 21/06)
US 16/687,966 (Appl 14/341,471) (Appl 11/738.936) (PCT/CA2007/000675)	Method and System for Determining Compatibility of Computer Systems	Pending	Nov 19, 2019 (pr. Apr 21/06)
US 15/494,797 (US 9,654,367) (PCT/CA2012/050561)	System and Method for Determining and Visualizing Efficiencies and Risks in Computing Environments	Pending	Apr 24, 2017 (pr. Aug 16/11)

US 14/472,001	System and Method for Providing a Capacity Reservation System for a Virtual or Cloud Computing Environment	Pending	March 1, 2013 (pr. Mar 1/12)
US 16/774,193 (US 15/384,107) (PCT/CA2015/050575) (62/015,183)	System and Method for Optimizing Placements of Virtual Machines on Hypervisor Hosts (renamed from Determination and Deployment of License Optimization Rules)	Pending	Jan 28, 2020 (pr. Jun 20/14)
US 15/616,640 (PCT/CA2015/051296) (62/089,496)	System and Method for Routing Workloads based on Proximity	Pending	Dec 9, 2015 (pr. Dec 9/14)

EXHIBIT C
TRADEMARKS

None.