PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	FIRST LIEN PATENT SECURITY AGREEMENT
SEQUENCE:	2

CONVEYING PARTY DATA

Name	Execution Date
DYNATRACE LLC	08/23/2018

RECEIVING PARTY DATA

Name:	JEFFERIES FINANCE LLC
Street Address:	520 MADISON AVENUE
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10022

PROPERTY NUMBERS Total: 60

Property Type	Number
Application Number:	09244274
Application Number:	09337175
Application Number:	09614305
Application Number:	09770969
Application Number:	09800080
Application Number:	10043824
Application Number:	10625943
Application Number:	10710120
Application Number:	10826548
Application Number:	10981107
Application Number:	11167057
Application Number:	11206486
Application Number:	11223264
Application Number:	11471319
Application Number:	11544090
Application Number:	11770427
Application Number:	11877804
Application Number:	12102534
Application Number:	12182513

PATENT REEL: 046923 FRAME: 0557

505061299

Property Type	Number
Application Number:	12344785
Application Number:	12502502
Application Number:	12552351
Application Number:	12727004
Application Number:	12783567
Application Number:	12794960
Application Number:	12814749
Application Number:	12823516
Application Number:	12862634
Application Number:	12978350
Application Number:	13319913
Application Number:	13363447
Application Number:	13609442
Application Number:	13627293
Application Number:	13722026
Application Number:	13775621
Application Number:	13910587
Application Number:	14056016
Application Number:	14085882
Application Number:	14227597
Application Number:	14338637
Application Number:	14338707
Application Number:	09199972
Application Number:	09277574
Application Number:	09475765
Application Number:	09558414
Application Number:	09813431
Application Number:	09870127
Application Number:	10114921
Application Number:	15412129
Application Number:	15347970
Application Number:	15264949
Application Number:	15264909
Application Number:	15264867
Application Number:	15227029
Application Number:	15157883
Application Number:	15157765
Application Number:	14995450

Property Type	Number
Application Number:	14879183
Application Number:	14718547
Application Number:	15783063

CORRESPONDENCE DATA

Fax Number: (312)993-9767

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

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

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Email: thomas.buettner@lw.com
Correspondent Name: THOMAS J. BUETTNER
Address Line 1: LATHAM & WATKINS LLP

Address Line 2: 330 NORTH WABASH AVENUE, SUITE 2800

Address Line 4: CHICAGO, ILLINOIS 60611

NAME OF SUBMITTER: THOMAS J. BUETTNER			
SIGNATURE:	/tjb/		
DATE SIGNED:	08/24/2018		

Total Attachments: 10

source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page1.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page2.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page3.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page4.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page5.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page6.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page7.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page8.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page9.tif source=Dynatrace - 1st Lien - IPSA - Patent Security Agt - Dynatrace LLC#page9.tif

PATENT SECURITY AGREEMENT

PATENT SECURITY AGREEMENT (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "IP Security Agreement"), dated as of August 23, 2018, is made by the Person listed on the signature page hereof (the "Grantor") in favor of Jefferies Finance LLC, acting through one or more of its branches or any Affiliate thereof ("Jefferies"), as collateral agent (in such capacity, together with any successor collateral agent appointed pursuant to Article IX of the Credit Agreement, the "Collateral Agent") for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, DYNATRACE INTERMEDIATE LLC, a Delaware limited liability company ("Holdings"), the Grantor, each lender from time to time party thereto (collectively, the "Lenders" and individually, a "Lender"), and Jefferies, as administrative agent and Collateral Agent, entered into that certain Senior Secured First Lien Credit Agreement, dated as of August 23, 2018 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"). Terms defined in the Credit Agreement and not otherwise defined herein are used herein as defined in the Credit Agreement or, if not defined therein, as defined in the Security Agreement referred to below.

WHEREAS, as a condition precedent to the making of Loans by the Lenders and the issuance of Letters of Credit by the L/C Issuers under the Credit Agreement, the entry into Bank Product Agreements by the Bank Product Providers from time to time and the entry into Secured Hedge Agreements by the Hedge Banks from time to time, the Grantor has executed and delivered that certain First Lien Security Agreement, dated as of August 23, 2018 made by the grantors party thereto from time to time to the Collateral Agent (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement").

WHEREAS, under the terms of the Security Agreement, the Grantor has granted to the Collateral Agent, for the ratable benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantor, and has agreed as a condition thereof to execute this IP Security Agreement for recording with the U.S. Patent and Trademark Office.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor agrees as follows:

SECTION 1. <u>Grant of Security</u>. The Grantor hereby grants to the Collateral Agent for the ratable benefit of the Secured Parties a security interest in all of the Grantor's right, title and interest in and to the following, except for any Excluded Property (the "Collateral"):

- (i) the patents and patent applications set forth in Schedule A hereto;
- (ii) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of the Grantor accruing thereunder or pertaining thereto;

IP Security Agreement

- (iii) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages and injunctive relief; and
- (iv) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral or arising from any of the foregoing.
- SECTION 2. <u>Security for Obligations</u>. The grant of a security interest in the Collateral by the Grantor under this IP Security Agreement secures the payment of all Obligations of the Grantor.
- SECTION 3. <u>Recordation</u>. The Grantor authorizes and requests that the Commissioner for Patents and any other applicable government officer record this IP Security Agreement.
- SECTION 4. <u>Execution in Counterparts</u>. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
- SECTION 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. The Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein. In the event of any conflict or inconsistency between this IP Security Agreement and the Security Agreement, the Security Agreement shall control.
- SECTION 6. <u>Governing Law</u>. This IP Security Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

IP Security Agreement

IN WITNESS WHEREOF, each Grantor has caused this IP Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

DYNATRACE LLC, a Delaware limited liability company

By: ___

Name: Kevin C. Burns

Title: Chief Financial Officer

[Signature Page to First Lien Patent Security Agreement]

Accepted and Agreed:

JEFFERIES FINANCE LLC,

as Collateral Agent

By: Cottest
Name: E. Joseph Hess

Title: Managing Director

[Signature Page to First Lien Patent Security Agreement]

Schedule A

PATENTS

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	Patent No.
Dynatrace LLC	Method to display information representing network traffic on a computer display monitor.	U.S.	Granted	02-03-1999	09244274	06-24-2003	6584501 Valid till: 2-3-2019
Dynatrace LLC	Application response time prediction.	U.S.	Granted	06-21-1999	09337175	05-21-2002	6393480 Valid till: 6-21-2019
Dynatrace LLC	Server monitoring.	U.S.	Granted	07-12-2000	09614305	06-28-2005	6912572 Valid till: 7-17-2022
Dynatrace LLC	Method and system to calculate network latency, and to display the same field of the invention.	U.S.	Granted	01-25-2001	09770969	07-26-2005	6922417 Valid till: 4-26-2023
Dynatrace LLC	Response time analysis of network performance.	U.S.	Granted	03-05-2001	09800080	11-07-2006	7133911 Valid till: 5-6-2023
Dynatrace LLC	Fast transaction response time prediction across multiple delay sources.	U.S.	Granted	01-11-2002	10043824	10-31-2006	7130915 Valid till: 10-6-2023
Dynatrace LLC	System and method of active latency detection for network applications.	U.S.	Granted	07-24-2003	10625943	04-29-2008	7366790 Valid till: 10-26-2025
Dynatrace LLC	Computer system tools and method for development and testing.	U.S.	Granted	06-20-2004	10710120	02-01-2011	7882179 Valid till: 3-14-2027
Dynatrace LLC	System and method for monitoring global network performance.	U.S.	Granted	04-16-2004	10826548	01-13-2009	7478151 Valid till: 1-10-2025
Dynatrace LLC	Visual landscape for multi- tiered application environment component interactions.	U.S.	Granted	11-03-2004	10981107	06-03-2008	7382371 Valid till: 1-8-2025
Dynatrace LLC	System and interface for monitoring information technology assets.	U.S.	Granted	06-24-2005	11167057	07-06-2010	7752301 Valid till: 5-25-2026
Dynatrace LLC	Characterizing application performance within a network.	U.S.	Granted	08-17-2005	11206486	08-11-2009	7574504 Valid till: 2-6-2023
Dynatrace LLC	Methods and apparatus for collecting performance metrics from a web site.	U.S.	Granted	09-09-2005	11223264	11-22-2011	8065410 Valid till: 5-28-2027

Schedule A to IP Security Agreement

US-DOCS\102986755.2

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	Patent No.
Dynatrace LLC	Methods and apparatus for collecting and displaying performance metrics from a web site.	U.S.	Granted	06-20-2006	11471319	03-23-2010	7685273 Valid till: 2-21-2027
Dynatrace LLC	Method of incorporating dbms wizards with analytical models for dbms server's performance optimization.	U.S.	Granted	10-06-2006	11544090	06-12-2012	8200659 Valid till: 10-6-2026
Dynatrace LLC	Analytics system and method.	U.S.	Granted	06-28-2007	11770427	05-22-2012	8185619 Valid till: 2-29-2028
Dynatrace LLC	Methods and apparatus for real user monitoring.	U.S.	Granted	10-24-2007	11877804	07-27-2010	7765295 Valid till: 10/24/2027
Dynatrace LLC	Website load testing using a plurality of remotely operating agents distributed over a wide area.	U.S.	Granted	04-14-2008	12102534	04-05-2011	7921205 Valid till: 4-21-2029
Dynatrace LLC	Methods and apparatus for real user monitoring including flash monitoring.	U.S.	Granted	07-30-2008	12182513	01-10-2012	8095650 Valid till: 1-3-2030
Dynatrace LLC	System and method for monitoring global network performance.	U.S.	Granted	12-29-2008	12344785	10-12-2010	7814201 Valid till: 5-18-2024
Dynatrace LLC	Multiple instance commercial browser website test agent.	U.S.	Granted	07-14-2009	12502502	03-26-2013	8407337 Valid till: 1-1-2032
Dynatrace LLC	Performance management tool having unified analysis report.	U.S.	Granted	09-02-2009	12552351	12-04-2012	8327335 Valid till: 5-28-2031
Dynatrace LLC	Methods and apparatus for collecting and displaying performance metrics from a web site.	U.S.	Granted	03-18-2010	12727004	11-22-2011	8065414 Valid till: 3-30-2025
Dynatrace LLC	System and interface for monitoring information technology assets.	U.S.	Granted	05-20-2010	12783567	08-07-2012	8239527 Valid till: 3-10-2024
Dynatrace LLC	Service quality evaluator having adaptive evaluation criteria.	U.S.	Granted	06-07-2010	12794960	10-09-2012	8285841 Valid till: 2-24-2031
Dynatrace LLC	Method for determining a business calendar across a shared computing infrastructure.	U.S.	Granted	06-14-2010	12814749	10-16-2012	8291059 Valid till: 2-19-2031

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	Patent No.
Dynatrace LLC	Service model creation using monitored data of the performance management tool.	U.S.	Granted	06-25-2010	12823516	10-09-2012	8285800 Valid till: 1-19-2031
Dynatrace LLC	System for computationally quantifying similarities between images.	U.S.	Granted	08-24-2010	12862634	07-30-2013	8498473 Valid till: 1-5-2032
Dynatrace LLC	Computer system tools and method for development and testing.	U.S.	Granted	12-23-2010	12978350	04-24-2012	8166123 Valid till: 6-20-2024
Dynatrace LLC	Performance monitoring of a media player launched by a web browser.	U.S.	Granted	07-31-2012	13319913	08-18-2015	9112825 Valid till: 2-8-2032
Dynatrace LLC	System and methods that enable automated testing of mobile devices at a remote monitor site.	U.S.	Granted	02-01-2012	13363447	06-30-2015	9071989 Valid till: 4-12-2034
Dynatrace LLC	Service quality evaluator having adaptive evaluation criteria.	U.S.	Granted	09-11-2012	13609442	09-20-2016	9448906 Valid till: 3-30-2033
Dynatrace LLC	Technique for simulating an orientation change event in a test environment.	U.S.	Granted	09-26-2012	13627293	05-31-2016	9355015 Valid till: 8-2-2033
Dynatrace LLC	Method and system for tracing end-to-end transaction which accounts for content update requests.	U.S.	Granted	12-20-2012	13722026	02-14-2017	9571591 Valid till: 1-20-2034
Dynatrace LLC	System and method for extracting instrumentation relevant inheritance relationships for a distributed, inheritance rule based instrumentation system.	U.S.	Granted	02-25-2013	13775621	06-02-2015	9047412 Valid till: 1-25-2028
Dynatrace LLC	System and methods for tracing individual transactions across a mainframe computing environment.	U.S.	Granted	06-05-2013	13910587	04-12-2016	9311214 Valid till: 6-2-2034
Dynatrace LLC	Method and system for browser based, non-intrusive measuring of end-user perceived performance of individual third party resource requests.	U.S.	Granted	10-17-2013	14056016	05-31-2016	9356842 Valid till: 5-6-2034

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	
Dynatrace LLC	Method and system for tracing individual transactions over messaging systems without adding tracing information to messages.	U.S.	Granted	11-21-2013	14085882	09-15-2015	9135138 Valid till: 11-21-2033
Dynatrace LLC	System and method for combining server side and network side transaction tracing and measurement data at the granularity level of individual transactions.	U.S.	Granted	03-27-2014	14227597	02-14-2017	9571373 Valid till: 1-9-2035
Dynatrace LLC	Method and system for combining trace data describing multiple individual transaction executions with transaction processing infrastructure monitoring data.	U.S.	Granted	07-23-2014	14338637	09-20-2016	9451017 Valid till: 1-22-2035
Dynatrace LLC	Method and system for real- time, false positive resistant, load independent and self- learning anomaly detection of measured transaction execution parameters like response times.	U.S.	Granted	07-23-2014	14338707	11-14-2017	9817884 Valid till: 12-6-2035
Dynatrace LLC	Method and apparatus for measuring the performance of a network based application program	U.S.	Granted	11-25-1998	09199972	09-03-2002	6446028 Valid till: 11-25-2018
Dynatrace LLC	Full service research bureau and test center method and apparatus	U.S.	Granted	03-26-1999	09277574	05-25-2004	6741967 Valid till: 3-26-2019
Dynatrace LLC	Method and system for evaluating quality of service over the internet	U.S.	Granted	12-30-1999	09475765	05-13-2008	7373376 Valid till: 12-30-2019
Dynatrace LLC	Method and system for scheduling measurement of site performance over the internet	U.S.	Granted	04-24-2000	09558414	07-08-2003	6591298 Valid till: 4-24-2020
Dynatrace LLC	System and method for wireless data performance monitoring	U.S.	Granted	03-20-2001	09813431	06-29-2004	6757543 Valid till: 11-26-2022
Dynatrace LLC	Method and system for evaluating quality of service for streaming audio and video	U.S.	Granted	05-29-2001	09870127	03-27-2007	7197557 Valid till: 3-29-2023
Dynatrace LLC	Method and system for evaluating quality of service for transactions over a network	U.S.	Granted	04-02-2002	10114921	06-24-2008	7392321 Valid till: 1-25-2024

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	Patent No.
Dynatrace LLC	Method And System For	US	Pending	2017-01-23	15412129		
	Tracing End-To-End						
	Transaction, Including						
	Browser Side Processing And						
	End User Performance						
	Experience						
Dynatrace LLC	System and method for	US	Pending	2016-11-10	15347970		
	measuring performance and						
	availability of applications						
	utilizing monitoring of						
	distributed systems processes						
	combined with analysis of the						
	network communication						
	between the processes.	T.T.C.		2016 00 11	1.532.10.10		
Dynatrace LLC	Method And System For	US	Pending	2016-09-14	15264949		
	Automated Injection Of						
	Process Type Specific In-						
	Process Agents On Process						
	Startup.	***************************************					
Dynatrace LLC	Method And System For	US	Pending	2016-09-14	15264909		
	Clustered Real-time						
	Correlation Of Trace Data						
	Fragments Describing						
	Distributed Transaction						
T. C.	Executions.			2016 00 11	15261067		
Dynatrace LLC	Method And System For Real-	US	Pending	2016-09-14	15264867		
	Time Causality And Root						
	Cause Determination Of						
	Transaction And Infrastructure						
	Related Events Provided By						
	Multiple, Heterogeneous						
Dymatraga I I C	Agents.	US	Danding	2016 09 02	15227020		
Dynatrace LLC	Method And System For Real- Time, Load-Driven	US	Pending	2016-08-03	13227029		
	Multidimensional And						
	Hierarchical Classification Of						
	Monitored Transaction						
	Executions For Visualization						
	And Analysis Tasks Like						
	Statistical Anomaly Detection.						
Dynatrace LLC	Synthetic Testing Of Web	US	Pending	2016-05-18	15157883		
Dynamace EEC	Applications Using	0.5	- chang	2010 05 10	13137003		
	Instrumented Monitoring						
	Agents.						
Dynatrace LLC	Synthetic test recorder installed	US	Pending	2016-05-18	15157765	-	
,	in line with a web portal.						
Dynatrace LLC	Method And System For	US	Pending	2016-01-14	14995450		
	Automated, Static	_ ~					
	Instrumentation For						
	Applications Designed For						
	Execution In Environments						
	With Restricted Resources,						
	Like Mobile Devices Or TV						
	Set Top Boxes						

Grantor	App title	Country	Status	Filed Date	App No.	Grant Date	Patent No.
Dynatrace LLC	Method And System For Real-	US	Pending	2015-10-09	14879183		
	time Modeling Of						
	Communication, Virtualization						
	And Transaction Execution						
	Related Topological Aspects						
	Of Monitored Software						
	Applications And Hardware						
	Entities						
Dynatrace LLC	Method And System For	US	Granted	2015-05-21	14718547	11-01-2016	9483378
	Resource Monitoring Of						Valid till:
	Large-Scale, Orchestrated,						5-21-2035
	Multi Process Job Execution						
	Environments						
Dynatrace LLC	Method And System For Real-	US	Pending	2017-10-13	15783063		
	Time, False Positive Resistant,						
	Load Independent And Self-						
	Learning Anomaly Detection						
	Of Measured Transaction						
	Execution Parameters Like						
	Response Times						

Schedule A to IP Security Agreement

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RECORDED: 08/24/2018