

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM581513

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	Supplement to Intellectual Property Security Agreement Recorded at Reel 6563 Frame 0334		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
QUANTUM CORPORATION, AS GRANTOR		06/16/2020	Corporation: DELAWARE
QUANTUM LTO HOLDINGS, LLC, AS GRANTOR		06/16/2020	Limited Liability Company: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	U.S. BANK NATIONAL ASSOCIATION, AS AGENT		
<b>Street Address:</b>	214 North Tryon Street, 27th Floor		
<b>City:</b>	Charlotte		
<b>State/Country:</b>	NORTH CAROLINA		
<b>Postal Code:</b>	28202		
<b>Entity Type:</b>	National Banking Association: UNITED STATES		
<b>PROPERTY NUMBERS Total: 3</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	4733513	ENTERPRISE STORAGE OS	
<b>Registration Number:</b>	4678667	ESOS	
<b>Registration Number:</b>	5454072	ATAVIUM	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	3107854601		
<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>			
<b>Phone:</b>	3107854600		
<b>Email:</b>	BoxIP@hoganlovells.com		
<b>Correspondent Name:</b>	Lina Perez, Hogan Lovells US LLP		
<b>Address Line 1:</b>	1999 Avenue of the Stars, Suite 1400		
<b>Address Line 4:</b>	Los Angeles, CALIFORNIA 90067		
<b>ATTORNEY DOCKET NUMBER:</b>	048009.000014		
<b>NAME OF SUBMITTER:</b>	Lina Perez		
<b>SIGNATURE:</b>	/Lina Perez /		
<b>DATE SIGNED:</b>	06/16/2020		

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**Total Attachments: 7**

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SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT (the "Supplement") made as of this 16th day of June, 2020, QUANTUM CORPORATION, a Delaware corporation ("Quantum"), QUANTUM LTO HOLDINGS, LLC, a Delaware limited liability company ("LTO") and together with Quantum and any other Person that may hereafter become a party to this Agreement as a grantor of liens under the Intellectual Property Security Agreement described below, collectively, "Grantors" and each a "Grantor", in favor of U.S. BANK NATIONAL ASSOCIATION, in its capacity as "Agent" under the Credit Agreement referenced below (in such capacity, together with its successors and permitted assigns, the "Agent");

W I T N E S S E T H

WHEREAS, Grantors and Agent are parties to a certain Intellectual Property Security Agreement, dated as of December 27, 2018 (as amended, modified, supplemented, renewed, restated or replaced from time to time, the "IP Security Agreement"). Capitalized terms used herein but not otherwise defined herein shall have the meanings given to such terms in the IP Security Agreement;

WHEREAS, pursuant to the IP Security Agreement, to secure the prompt payment and performance of all Obligations to Agent and each other Secured Party, Grantors have assigned, pledged and granted to Agent, for the ratable benefit of the Secured Parties, a continuing security interest in and to and lien upon all of such Grantor's right, title and interest in, to and under the Intellectual Property Collateral of each Grantor, all whether now owned or hereafter created, arising and/or acquired; and

WHEREAS, pursuant to the IP Security Agreement, Grantors have agreed that upon the acquisition by any Grantor of any new Intellectual Property Collateral, Grantors shall deliver to Agent a Supplement to the IP Security Agreement in the form of Exhibit A thereto pursuant to which Grantors shall reconfirm the grant by them of a security interest in and lien upon all such newly acquired Intellectual Property Collateral, which such Supplement is intended by the parties to be filed with the United States Patent and Trademark Office and/or United States Copyright Office, as applicable.

NOW, THEREFORE, in consideration of the premises set forth herein and for other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged by each party hereto, and intending to be legally bound, and with the foregoing background and recitals incorporated by reference, Grantors agree as follows:

1. Grant and Reaffirmation of Grant of Security Interests. Without limiting any other grant of any security interest or lien by any Grantor in and upon any Collateral under the Credit Agreement or any of the Other Documents, to secure the prompt payment and performance of all Obligations to Agent and the other Secured Parties, each Grantor hereby assigns, pledges and grants to Agent, for the ratable benefit of the Secured Parties, a continuing security interest in and to and lien upon all of such Grantor's right, title and interest in, to and

under the following Collateral of such Grantor, all whether now owned or hereafter created, arising and/or acquired: the newly acquired Intellectual Property Collateral listed on Schedule 1 to this Supplement (together with all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing). Grantors agree that all such newly acquired Intellectual Property Collateral described above shall be included in and be part of the Intellectual Property Collateral under and subject to all of the terms and provisions of the IP Security Agreement. Grantors hereby authorize Agent and attorneys for the Lenders to file and record a copy of this Supplement with the United States Patent and Trademark Office and/or United States Copyright Office, as applicable.

2. Incorporation of the IP Security Agreement. The terms and provisions of the IP Security Agreement are hereby incorporated by reference and this Supplement shall be considered an amendment and supplement to and part of the IP Security Agreement; all of the provisions of which IP Security Agreement are and remain in full force and effect as supplemented by this Supplement.

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IN WITNESS WHEREOF, Grantors have duly executed this Supplement to the IP Security Agreement as of the date first written above.

GRANTORS:

QUANTUM CORPORATION

By: 

Name: J. Michael Dodson

Title: Chief Financial Officer

QUANTUM LTO HOLDINGS, LLC

By: 

Name: J. Michael Dodson

Title: Chief Financial Officer

[Signature Page to Supplement to Intellectual Property Security Agreement]

TRADEMARK

REEL: 006971 FRAME: 0374

ACCEPTED AND AGREED  
as of the date first above written:

U.S. BANK NATIONAL ASSOCIATION,  
solely in its capacity as Agent and not in its  
individual capacity

By: *Crystal Crudup-Burt*  
Name: Crystal Crudup-Burt  
Title: Vice President

SCHEDULE I

TO SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

DATED JUNE 16, 2020

**Patents and Patent Applications**

<b>PATENT</b>	<b>(SERIAL NO.) PATENT NO.</b>	<b>(FILING DATE ) REGIS. DATE</b>	<b>HOLDER</b>
JOINT DE-DUPLICATION-ERASURE CODED DISTRIBUTED STORAGE	(16285320)	(2/26/2019)	Quantum Corporation
ADAPTIVE PRE-FETCH	(16268868)	(2/6/2019)	Quantum Corporation
DATA BAND IDENTIFICATION FOR TAPE SERVO SYSTEM USING MULTIPLE SERVO BANDS	(16406448)	(5/8/2019)	Quantum LTO Holdings, LLC
ERASURE CODING MAGNETIC TAPES FOR MINIMUM LATENCY AND ADAPTIVE PARITY PROTECTION FEEDBACK	(16421685)	(5/24/2019)	Quantum Corporation
GLOBAL STORAGE SOLUTION WITH LOGICAL CYLINDERS AND CAPSULES	(16665756)	(10/28/2019)	Quantum Corporation
FILTER FILE SYSTEM WITH INODE NUMBER AS PRIMARY DATABASE KEY	(16669574)	(10/31/2019)	Quantum Corporation
CLOUD-BASED SOLID STATE DEVICE (SSD) WITH DYNAMICALLY VARIABLE ERROR CORRECTING CODE (ECC) SYSTEM	(16549433)	(8/23/2019)	Quantum Corporation
DATA STORAGE ACROSS SIMPLIFIED STORAGE VOLUMES	(16653454)	(10/15/2019)	Quantum Corporation
SYSTEMS AND METHODS FOR RANDOM TO SEQUENTIAL STORAGE MAPPING	(15796234)	(10/27/2017)	Quantum Corporation
SYSTEMS AND METHODS FOR DATA MANAGEMENT USING ZERO-TOUCH TAGGING	(15795882)	(10/27/2017)	Quantum Corporation
SYSTEMS AND METHODS FOR VIEWING AND ACCESSING DATA USING TAGGING	(15795961)	(10/27/2017)	Quantum Corporation
DIAGNOSTIC TAPE CARTRIDGE PATTERNED WITH PREDETERMINED HEAD-MEDIA SPACINGS FOR TESTING A TAPE HEAD OF A TAPE DRIVE	(10559322)	(02/11/2020)	Quantum Corporation
MAGNETIC TAPE CARTRIDGE WITH INCREASED DATA STORAGE CAPACITY	(16404552)	(05/06/2019)	Quantum Corporation
IMPROVED MAGNETIC TAPE MEDIA CARTRIDGE	(62926994)	(10/28/2019)	Quantum Corporation
IMPROVED MAGNETIC TAPE MEDIA CARTRIDGE	(62927001)	(10/28/2019)	Quantum Corporation

<b>PATENT</b>	<b>(SERIAL NO.) PATENT NO.</b>	<b>(FILING DATE ) REGIS. DATE</b>	<b>HOLDER</b>
INTELLIGENT LIBRARY ARCHITECTURE BASED ON DISTRIBUTED COMPUTING USING LOCAL TAPE DRIVE ELECTRONICS FOR HIGH AREAL DENSITY TAPE STORAGE	(62926999)	(10/28/2019)	Quantum Corporation
SYSTEM AND METHOD FOR RAPID REPLACEMENT OF ROBOTIC MEDIA MOVER IN AUTOMATED MEDIA LIBRARY	(16677529)	(11/07/2019)	Quantum Corporation
CLIMATE CONTROLLER FOR MEDIA LIBRARY	(16688115)	(11/19/2019)	Quantum Corporation
SYSTEM AND METHOD FOR EVALUATING THE INTERNAL STATE OF A MEDIA LIBRARY	(16745188)	(01/16/2020)	Quantum Corporation
STORAGE ARRAY SUPPORTING MULTI- THREAD ACCESS	(16817851)	(03/13/2020)	Quantum Corporation
DISTRIBUTED ERASURE ENCODING IN SHARED FILE SYSTEM	(16830516)	(03/26/2020)	Quantum Corporation
NON-VOLATILE STORAGE DEVICE WITH VOLATILE MEMORY	(63009030)	(04/13/2020)	Quantum Corporation
METHODS FOR AUTOMATED MEANS TO MECHANICALLY PREVENT ACCESS TO DATA ON MEDIA TO PROTECT FROM MALWARE INTRUSION	(63017452)	(04/29/2020)	Quantum Corporation
SYSTEM AND METHOD FOR CONTROLLING INTERNAL TEMPERATURE OF MEDIA LIBRARY	(16869460)	(05/07/2020)	Quantum Corporation



## Trademarks and Trademark Applications

TRADEMARK	APPL. DATE	APPL. NO.	REG. DATE	REG. NO.	OWNER
ENTERPRISE STORAGE OS	10/25/2014	86434683	05/05/2015	4733513	Quantum Corporation
ESOS	06/19/2014	86314782	01/27/2015	4678667	Quantum Corporation
ATAVIUM	03/26/2016	86950215	04/24/2018	5454072	Quantum Corporation