OP \$90.00 4733513

ETAS ID: TM581493

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Quantum Corporation		06/16/2020	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	PNC Bank, National Association
Street Address:	500 First Avenue
Internal Address:	Commercial Loan Service Center/DCC
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15219
Entity Type:	National Banking Association: UNITED STATES

PROPERTY NUMBERS Total: 3

Property Type	Number	Word Mark		
Registration Number:	4733513	ENTERPRISE STORAGE OS		
Registration Number:	4678667	ESOS		
Registration Number:	5454072	ATAVIUM		

CORRESPONDENCE DATA

Fax Number: 2158325619

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: 2155695619

Email: pecsenye@blankrome.com

Correspondent Name: Timothy D. Pecsenye (074658-16079 ND)

Address Line 1: One Logan Square

Address Line 2: 8th Floor

Address Line 4: Philadelphia, PENNSYLVANIA 19103

MANE OF CURNITTED.	r:
NAME OF SUBMITTER:	Fimothy D. Pecsenye
SIGNATURE: /T	Timothy D. Pecsenye/
DATE SIGNED: 06	06/16/2020

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", 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 PNC BANK, NATIONAL ASSOCIATION, a national banking association, in its capacity as "Agent" under the Credit Agreement referenced below (in such capacity, together with its successors and permitted assigns, the "Agent"):

$\underline{W} \underline{I} \underline{T} \underline{N} \underline{E} \underline{S} \underline{S} \underline{E} \underline{T} \underline{H}$

WHEREAS, Grantors and Agent are parties to a certain Amended and Restated 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 its benefit and for the ratable benefit of the other 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 its benefit and for the ratable benefit of the other 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 <u>Schedule 1</u> 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 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. <u>Incorporation of the IP Security Agreement</u>. 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.

[Remainder of Page Left Intentionally Blank]

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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

Name: J. Michael Dodson

Title: Chief Financial Officer

[Signature Page to Supplement to Intellectual Property Security Agreement]

TRADEMARK

REEL: 006971 FRAME: 0241

ACCEPTED AND AGREED as of the date first above written:

PNC BANK, NATIONAL ASSOCIATION, as Agent

By: Daniela Stemonts Digitally signed by Daniela Plemonte Plemonte Date: 2020.06.15.09:59:10-05'00'

Name: Daniela Piemonte Title: Vice President

SCHEDULE I

TO SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

DATED JUNE 16, 2020

Patents and Patent Applications

PATENT	(SERIAL NO.) PATENT NO.	(FILING DATE) REGIS. DATE	HOLDER
JOINT DE-DUPLICATION-ERASURE CODED DISTRIBUTED STORAGE	(16285320)	(2/26/2019)	Quantum Corporation
ADAPTIVE PRE-FETCH	(16268868)	(2/6/2019)	Quantum Corporation
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

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PATENT	(SERIAL NO.) PATENT NO.	(FILING DATE) REGIS. DATE	HOLDER
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

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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

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RECORDED: 06/16/2020