PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6799481

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
BARNES & NOBLE COLLEGE BOOKSELELRS, LLC	05/28/2021

RECEIVING PARTY DATA

Name:	BANK OF AMERICA, N.A., AS COLLATERAL AGENT
Street Address:	900 W. TRADE STREET
Internal Address:	NC1-026-06-09
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255

PROPERTY NUMBERS Total: 49

Property Type	Number
Patent Number:	8963865
Patent Number:	8963869
Patent Number:	8966617
Patent Number:	9001064
Patent Number:	9030430
Patent Number:	9069458
Patent Number:	9098695
Patent Number:	9134892
Patent Number:	9134893
Patent Number:	9134903
Patent Number:	9146672
Patent Number:	9152321
Patent Number:	9189084
Patent Number:	9261985
Patent Number:	9310890
Patent Number:	9367161
Patent Number:	9367208
Patent Number:	9367212
Patent Number:	9424241

PATENT REEL: 056784 FRAME: 0426

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Property Type	Number
Patent Number:	9448643
Patent Number:	9448719
Patent Number:	9477382
Patent Number:	9588979
Patent Number:	9600053
Patent Number:	9612740
Patent Number:	9626008
Patent Number:	9632594
Patent Number:	9760187
Patent Number:	9766723
Patent Number:	9785259
Patent Number:	9792272
Patent Number:	9891722
Patent Number:	9927963
Patent Number:	9946365
Patent Number:	10319073
Patent Number:	10331777
Patent Number:	10503346
Patent Number:	10534528
Patent Number:	10620796
Patent Number:	10719914
Patent Number:	10915698
Patent Number:	10976856
Application Number:	15784874
Application Number:	15935834
Application Number:	16392058
Application Number:	16450472
Application Number:	16685240
Application Number:	16707576
Application Number:	16845550

CORRESPONDENCE DATA

Fax Number: (704)444-8847

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: 704-343-2000

Email: ksaltrick@mcguirewoods.com

Correspondent Name: MCGUIREWOODS LLP
Address Line 1: 201 N. TRYON STREET
Address Line 2: ATTENTION: E.BUCKLEY

PATENT

REEL: 056784 FRAME: 0427

Address Line 4: CHAI	RLOTTE, NORTH CAROLINA 28202						
NAME OF SUBMITTER:	ELIZABETH BUCKLEY						
SIGNATURE:	/s/ Elizabeth Buckley						
DATE SIGNED: 07/07/2021							
Total Attachments: 9							
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GRANT OF SECURITY INTEREST IN PATENTS

This **GRANT OF SECURITY INTEREST IN PATENTS** (this "<u>Agreement</u>"), dated as of May 28, 2021, is made by and among the parties identified as "Grantors" on the signature pages hereto (each, individually, a "<u>Grantor</u>", and collectively, the "<u>Grantors</u>") and BANK OF AMERICA, N.A., as collateral agent for the Secured Parties (in such capacity, the "<u>Collateral Agent</u>").

WHEREAS, a credit facility was established in favor of Barnes & Noble Education, Inc., a Delaware corporation (the "Lead Borrower"), and the other borrowers party to the Credit Agreement (as defined herein) (collectively with the Lead Borrower, the "Borrowers" and, collectively, with the Guarantors (as defined therein), the "Loan Parties"), pursuant to the terms of that certain Credit Agreement, dated as of August 3, 2015 (as amended by the First Amendment to Credit Agreement, dated as of February 27, 2017, as further amended by the Second Amendment to Credit Agreement, dated as of March 1, 2019, as further amended by the Third Amendment and Waiver to Credit Agreement and First Amendment to Security Agreement dated as of March 31, 2021 (the "Third Amendment"), and as further amended, modified, extended, restated, replaced, or supplemented from time to time, the "Credit Agreement"), by and among the Loan Parties, the Lenders party thereto and Bank of America, N.A., as Administrative Agent (in such capacity, the "Administrative Agent"), L/C Issuer and Swingline Lender;

WHEREAS, under the Security Agreement, dated as of August 3, 2015, made by the Grantors (amongst other grantors) and the Collateral Agent (as amended, amended and restated, restated, supplemented or otherwise modified and in effect from time to time, the "Security Agreement"), each Grantor granted to the Collateral Agent, for the benefit of the Secured Parties, a continuing security interest in, and a right to set off against, any and all right, title and interest of such Grantor in and to the Collateral (as defined in the Security Agreement), including in (a) all letters patent of the United States and all reissues and extensions thereof, and (b) all applications for letters patent of the United States and all divisions, continuations and continuations-in-part thereof ("Patents"); and

WHEREAS, pursuant to the terms of the Security Agreement and the Third Amendment, the Grantors are required to execute this Agreement.

NOW, THEREFORE, in consideration of these premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. *Definitions*. Unless otherwise defined herein, capitalized terms used herein shall have the meanings given to such terms in the Security Agreement and, if not defined therein, in the Credit Agreement.

SECTION 2. *Grant of Security Interest*. To secure the prompt payment and performance in full when due, whether by lapse of time, acceleration, mandatory prepayment or otherwise, of the Obligations, each Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a continuing security interest in, and a right to set off against, any and all right,

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title and interest of such Grantor in and to all of Patents, whether now owned or existing or owned, acquired or arising hereafter, including the patents and patent applications set forth on <u>Schedule 1</u> hereto (collectively, the "<u>Patent Collateral</u>"). The Grantors and the Collateral Agent, on behalf of the Secured Parties, hereby acknowledge and agree that the security interest created hereby in the Patent Collateral is not to be construed as an assignment of any Patents.

SECTION 3. *Purpose*. This Agreement has been executed and delivered by each Grantor for the purpose of recording the grant of security interest herein with the USPTO.

SECTION 4. *Acknowledgment*. Each Grantor does hereby further acknowledge and affirm that the rights and remedies of the Secured Parties with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 5. *Counterparts*. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be an original, but all of which shall constitute one and the same instrument. It shall not be necessary in making proof of this Agreement to produce or account for more than one such counterpart. Delivery of an executed counterpart of a signature page of this Agreement by fax transmission or other electronic mail transmission (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Agreement.

SECTION 6. *Governing Law; Submission to Jurisdiction; Venue; WAIVER OF JURY TRIAL*. The terms of <u>Sections 10.14</u> and <u>10.15</u> of the Credit Agreement with respect to governing law, submission to jurisdiction, venue and waiver of jury trial are incorporated herein by reference, *mutatis mutandis*, and the parties hereto agree to such terms.

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IN WITNESS WHEREOF, the parties hereto have caused this Grant of Security Interest in Patents to be duly executed by their respective authorized officers as of the day and year first above written.

GRANTORS:

BARNES & NOBLE COLLEGE BOOKSELLERS,

LLC

BNED LOUDCLOUD, LLC

Name: Thomas D. Donohue

Title: Executive Vice President and Chief Financial

Officer

Acknowledged and Accepted:

BANK OF AMERICA, N.A.,

as Collateral Agent

Typed Name: Roger Malouf

Typed Title: Senior Vice President

SCHEDULE I

U.S. Patent Registrations

Grantor	<u>Title</u>	Patent Numbers	Issue Date
Barnes & Noble College Booksellers, LLC	Touch Sensitive Device with Concentration Mode	8963865	February 24, 2015
Barnes & Noble College Booksellers, LLC	Color Pattern Unlocking Techniques for Touch Sensitive Devices	8963869	February 24, 2015
Barnes & Noble College Booksellers, LLC	Image Pattern Unlocking Techniques for Touch Sensitive Devices	8966617	February 24, 2015
Barnes & Noble College Booksellers, LLC	Touch Sensitive Device with Pinch-Based Archive and Restore Functionality	9001064	April 7, 2015
Barnes & Noble College Booksellers, LLC	Multi-Touch Navigation Mode	9030430	May 12, 2015
Barnes & Noble College Booksellers, LLC	Kid Mode User Interface with Application- Specific Configurability	9069458	June 30, 2015
Barnes & Noble College Booksellers, LLC	Secure Note System for Computing Device Lock Screen	9098695	August 04, 2015
Barnes & Noble College Booksellers, LLC	Drag-Based Content Selection Technique for Touch Screen UI	9134892	September 15, 2015
Barnes & Noble College Booksellers, LLC	Block-Based Content Selecting Techniques for Touch Screen UI	9134893	September 15, 2015
Barnes & Noble College Booksellers, LLC	Content Selecting Technique for Touch Screen UI	9134903	September 15, 2015

March 07, 2017	9588979	UI Techniques for Navigating a File Manager of an Electronic Computing Device	Barnes & Noble College Booksellers, LLC
October 25, 2016	9477382	Multi-Page Content Selection Technique	Barnes & Noble College Booksellers, Inc.
September 20, 2016	9448719	Touch Sensitive Device with Pinch-Based Expand/Collapse Function	Barnes & Noble College Booksellers, LLC
September 20, 2016	9448643	Stylus Sensitive Device with Stylus Angle Detection Functionality	Barnes & Noble College Booksellers, LLC
August 23, 2016	9424241	Annotation Mode Including Multiple Note Types For Paginated Digital Content	Barnes & Noble College Booksellers, LLC
June 14, 2016	9367212	User Interface for Navigating Paginated Digital Content	Barnes & Noble College Booksellers, LLC
June 14, 2016	9367208	Move Icon to Reveal Textual Information	Barnes & Noble College Booksellers, LLC
June 14, 2016	9367161	Touch Sensitive Device with Stylus-Based Grab and Paste Functionality	Barnes & Noble College Booksellers, LLC
April 12, 2016	9310890	Shake-Based Functions on a Computing Device	Barnes & Noble College Booksellers, LLC
February 16, 2016	9261985	Stylus-Based Touch-Sensitive Area for UI Control of Computing Device	Barnes & Noble College Booksellers, LLC
November 17, 2015	9189084	Stylus-Based User Data Storage and Access	Barnes & Noble College Booksellers, LLC
October 06, 2015	9152321	Touch Sensitive UI Technique for Duplicating Content	Barnes & Noble College Booksellers, LLC
September 29, 2015	9146672	Multidirectional Swipe Key for Virtual Keyboard	Barnes & Noble College Booksellers, LLC
Issue Date	Patent Numbers	<u>Title</u>	Grantor

	9946365	Stylus-Based Pressure-Sensitive Area for UI Control of Computing Device	Barnes & Noble College Booksellers, LLC
	9927963	Digital Flash Cards Including links to Digital Content	Barnes & Noble College Booksellers, LLC
2 February 13, 2018	9891722	Stylus-Based Notification System	Barnes & Noble College Booksellers, LLC
October 17, 2017	9792272	Deleting Annotations of Paginated Digital Content	Barnes & Noble College Booksellers, LLC
October 10, 2017	9785259	Stylus-Based Slider Functionality for UI Control of Computing Device	Barnes & Noble College Booksellers, LLC
September 19, 2017	9766723	Stylus Sensitive Device with Hover Over Stylus Control Functionality	Barnes & Noble College Booksellers, LLC
7 September 12, 2017	9760187	Stylus with Active Color Display/Select for Touch Sensitive Devices	Barnes & Noble College Booksellers, LLC
4 April 25, 2017	9632594	Stylus Sensitive Device with Stylus Idle Functionality	Barnes & Noble College Booksellers, LLC
April 18, 2017	9626008	Stylus-Based Remote Wipe of Lost Device	Barnes & Noble College Booksellers, LLC
April 04, 2017	9612740	Swipe-Based Delete Confirmation for Touch Sensitive Devices	Barnes & Noble College Booksellers, Inc.
March 21, 2017	9600053	Stylus Control Feature for Locking/Unlocking Touch Sensitive Devices	Barnes & Noble College Booksellers, LLC
bers Issue Date	Patent Numbers	<u>Title</u>	Grantor

Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	<u>Grantor</u>
Swipe-Based Confirmation for Touch Sensitive Devices	Multi-Purpose Tool For Interacting With Paginated Digital Content	Universal Digital Content Zooming Techniques	Visual Thumbnail Scrubber for Digital Content	Digital Flash Card Techniques	Swipe-Based Confirmation for Touch Sensitive Devices	Merging Annotations of Paginated Digital Content	<u>Title</u>
10976856	10915698	10719914	10620796	10534528	10503346	10331777	Patent Numbers
April 13, 2021	February 9, 2021	July 21, 2020	April 14, 2020	January 14, 2020	December 10, 2019	June 25, 2019	Issue Date

Barnes & Noble College Booksellers, LLC	BNED LoudCloud, LLC	Grantor		Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	
Filtering and Searching Annotations of Paginated Digital Content	System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles	<u>Title</u>	U.S. Patent Applications	Swipe-Based Confirmation for Touch Sensitive Devices	Multi-Purpose Tool For Interacting With Paginated Digital Content	Universal Digital Content Zooming Techniques	Visual Thumbnail Scrubber for Digital Content	Digital Flash Card Techniques	Swipe-Based Confirmation for Touch Sensitive Devices	Merging Annotations of Paginated Digital Content	
15/784874	13/973725	Patent Application No.		10976856	10915698	10719914	10620796	10534528	10503346	10331777	
October 16, 2017	August 22, 2013	Filing Date		April 13, 2021	February 9, 2021	July 21, 2020	April 14, 2020	January 14, 2020	December 10, 2019	June 25, 2019	
	Filtering and Searching Annotations of Paginated Digital Content 15/784874	System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content 13/973725 15/784874	System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content Patent Application No. 13/973725 13/973725	Title Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content Digital Content	Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content 10976856 Patent Application No. 13/973725	Multi-Purpose Tool For Interacting With Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content Hongital Content Filtering and Searching Annotations of Paginated Digital Content	Universal Digital Content Zooming Techniques Multi-Purpose Tool For Interacting With Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content	Visual Thumbnail Scrubber for Digital Content Universal Digital Content Zooming Techniques Universal Digital Content Zooming Techniques Multi-Purpose Tool For Interacting With Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content	Digital Flash Card Techniques Visual Thumbnail Scrubber for Digital Content Universal Digital Content Zooming Techniques Multi-Purpose Tool For Interacting With Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content	Swipe-Based Confirmation for Touch Sensitive Devices 10503346 December 10, 2019 Digital Flash Card Techniques 10534528 January 14, 2020 Visual Thumbnail Scrubber for Digital Content 10620796 April 14, 2020 Universal Digital Content Zooming Techniques 10719914 July 21, 2020 Multi-Purpose Tool For Interacting With Paginated Digital Content Sensitive Devices Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications Title System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content Digital Content 15/784874 October 16, 2017	Merging Annotations of Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices Digital Flash Card Techniques Uisual Thumbnail Scrubber for Digital Content Universal Digital Content Zooming Techniques Universal Digital Content Zooming Techniques Multi-Purpose Tool For Interacting With Paginated Digital Content Swipe-Based Confirmation for Touch Sensitive Devices U.S. Patent Applications U.S. Patent Applications Fille System and Method Facilitating Adaptive Learning Based on User Behavioral Profiles Filtering and Searching Annotations of Paginated Digital Content 15/784874 Filtering and Searching Annotations of Paginated Digital Content

RECORDED: 07/07/2021

Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC	Barnes & Noble College Booksellers, LLC
ooksellers, LLC	ooksellers, LLC	ooksellers, LLC	ooksellers, LLC	ooksellers, LLC
Visual Thumbnail Scrubber for Digital Content	Swipe-Based Confirmation for Touch Sensitive Devices	Digital Flash Card Techniques	Merging Annotations of Paginated Digital Content	Universal Digital Content Zooming Techniques
16/845550	16/707,576	16/685240	16/450472	16/392058
April 10, 2020	December 9, 2019	November 15, 2019	June 24, 2019	April 23, 2019
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