

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4601637

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
PERMABIT TECHNOLOGY CORPORATION	07/31/2017
RECEIVING PARTY DATA	
Name:	RED HAT, INC.
Street Address:	100 EAST DAVIE STREET
City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27601
PROPERTY NUMBERS Total: 3	
Property Type	Number
Application Number:	15004217
Application Number:	14696564
Application Number:	13782836
CORRESPONDENCE DATA	
Fax Number:	(877)812-1249
<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:	9192382300
Email:	cstiers@wt-ip.com
Correspondent Name:	RED HAT, INC AND WITHROW & TERRANOVA, PLLC
Address Line 1:	106 PINEDALE SPRINGS WAY
Address Line 4:	CARY, NORTH CAROLINA 27511
ATTORNEY DOCKET NUMBER:	1145-052, -053C, -054
NAME OF SUBMITTER:	CATHERINE STIERS
SIGNATURE:	/Catherine Stiers/
DATE SIGNED:	09/19/2017
Total Attachments: 10	
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EXECUTION VERSION

PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (the "**Agreement**") is entered into as of July 31, 2017 (the "**Effective Date**"), by and between Permabit Technology Corporation, a Delaware corporation having its principal place of business at 1 Alewife Center, Suite 330, Cambridge, MA 02140 (the "**Assignor**") and Red Hat, Inc., a Delaware corporation having its principal place of business at 100 East Davie Street, Raleigh, NC 27601 (the "**Assignee**").

EFJ
19 Sep 17

WHEREAS, the Assignor and the Assignee have entered into the Asset Purchase Agreement, dated July 31, 2017, pursuant to which the Assignor has agreed to assign to the Assignee substantially all of the assets of the Assignor, including certain patents and patent applications.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises herein contained, the parties agree as follows:

**ARTICLE 1
ASSIGNOR PATENTS**

"Assignor Patents" shall mean (i) the patents and patent applications listed on Schedule 1, along with any patent applications from which any such patents or patent applications claim priority, directly or indirectly; and (ii) any patents, patent applications, extensions, divisions, continuations, continuation-in-parts, reexaminations, reissues, and foreign counterparts that claim priority from any patents or patent applications set forth in section (i) above.

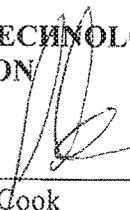
**ARTICLE 2
ASSIGNMENT**

The Assignor assigns, transfers and conveys to the Assignee all of the Assignor's rights, title and interest throughout the world in and to the Assignor Patents, the underlying inventions described therein, and all rights, claims and privileges pertaining to the Assignor Patents, including rights to all past, present, and future causes of action and damages relating to the Assignor Patents.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

ASSIGNOR:

**PERMABIT TECHNOLOGY
CORPORATION**

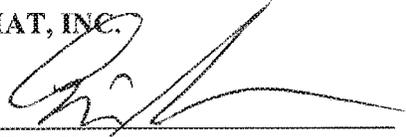
By: 
Name: Thomas Cook
Title: Chief Executive Officer

[Signature Page to Patent Assignment Agreement]

**PATENT
REEL: 043631 FRAME: 0452**

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

RED HAT, INC.

By: 
Name: Eric Shander
Title: Executive Vice President and
Chief Financial Officer

SIGNATURE PAGE TO PATENT ASSIGNMENT AGREEMENT

PATENT
REEL: 043631 FRAME: 0453

**SCHEDULE I
TO
PATENT ASSIGNMENT AGREEMENT**

Issued Patents

<i>Appl. #</i>	<i>Patent #</i>	<i>Loc.</i>	<i>Title</i>	<i>Filing Date</i>	<i>Issue Date</i>	<i>Inventors</i>	<i>Owner</i>
09/785,535	US 7,412,462	US	Data repository and method for promoting network storage of data	16-Feb-2001	12-Aug-2008	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; Sam Hartman; George E. Hemsey II	Permabit Technology Corporation
10/752,983	US 7,457,959	US	Data repository and method for promoting network storage of data	7-Jan-2004	25-Nov-2008	Norman H. Margolus; Thomas F. Knight, Jr.	Permabit Technology Corporation
10/752,774	US 7,657,931	US	Data repository and method for promoting network storage of data	7-Jan-2004	2-Feb-2010	Norman H. Margolus; Thomas F. Knight, Jr.	Permabit Technology Corporation
10/752,846	US 7,693,814	US	Data repository and method for promoting network storage of data	7-Jan-2004	6-Apr-2010	Norman H. Margolus; Thomas F. Knight, Jr.	Permabit Technology Corporation
10/752,775	US 7,587,617	US	Data repository and method for promoting network storage of data	7-Jan-2004	8-Sep-2009	Norman H. Margolus; Thomas F. Knight, Jr.	Permabit Technology Corporation
10/752,769	US 7,287,030	US	Data repository and method for promoting network storage of data	7-Jan-2004	23-Oct-2007	Norman H. Margolus; Thomas F. Knight, Jr.	Permabit Technology Corporation
10/752,837	US 7,124,305	US	Data repository and method for promoting network storage of data	7-Jan-2004	17-Oct-2006	Norman H. Margolus; Thomas F. Knight, Jr.; Gill A. Pratt	Permabit Technology Corporation
10/752,847	US 7,356,701	US	Data repository and method for promoting network storage of data	7-Jan-2004	8-Apr-2008	Norman H. Margolus; Thomas F. Knight, Jr.; Gill A. Pratt	Permabit Technology Corporation

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10/870,133	US 7,506,173	US	Data repository and method for promoting network storage of data	17-May-2004	17-Mar-2009	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; Sam Hartman; George E. Homsey II	Permabit Technology Corporation
10/967,071	US 7,685,096	US	Data repository and method for promoting network storage of data	14-Oct-2004	23-Mar-2010	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; George E. Homsey II	Permabit Technology Corporation
10/967,031	US 7,398,283	US	Data repository and method for promoting network storage of data	14-Oct-2004	8-Jul-2008	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; George E. Homsey II	Permabit Technology Corporation
12/749,603	US 9,177,175	US	Data repository and method for promoting network storage of data	30-Mar-2010	3-Nov-2015	Norman H. Margolus; Jered J. Floyd	Permabit Technology Corporation
10/374,517	US 7,478,096	US	History Preservation in a Computer Storage System	26-Feb-2003	13-Jan-2009	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/752,834	US 7,987,197	US	History Preservation in a Computer Storage System	7-Jan-2004	26-Jul-2011	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/752,980	US 8,055,628	US	History Preservation in a Computer Storage System	7-Jan-2004	8-Nov-2011	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/752,844	US 7,979,397	US	History Preservation in a Computer Storage System	7-Jan-2004	12-Jul-2011	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/752,839	US 9,104,716	US	History Preservation in a Computer Storage System	7-Jan-2004	11-Aug-2015	Norman H. Margolus	Permabit Technology Corporation

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10/752,848	US 7,912,855	US	History Preservation in a Computer Storage System	7-Jan-2004	22-Mar-2011	Norman H. Margolus	Permabit Technology Corporation
10/752,838	US 7,363,326	US	Archive with Timestamps and Deletion Management	7-Jan-2004	22-Apr-2008	Norman H. Margolus	Permabit Technology Corporation
10/753,193	US 7,734,595	US	Communicating Information Between Clients of a Data Repository That Have Deposited Identical Data Items	7-Jan-2004	8-Jun-2010	Norman H. Margolus	Permabit Technology Corporation
10/752,733	US 7,496,555	US	History Preservation in a Computer Storage System	7-Jan-2004	24-Feb-2009	Norman H. Margolus	Permabit Technology Corporation
10/752,732	US 7,467,144	US	History Preservation in a Computer Storage System	7-Jan-2004	16-Dec-2008	Norman H. Margolus	Permabit Technology Corporation
10/752,958	US 7,930,315	US	History Preservation in a Computer Storage System	7-Jan-2004	19-Apr-2011	Norman H. Margolus	Permabit Technology Corporation
10/752,872	US 7,318,072	US	History Preservation in a Computer Storage System	7-Jan-2004	8-Jan-2008	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/753,125	US 8,095,516	US	History Preservation in a Computer Storage System	7-Jan-2004	10-Jan-2012	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation
10/752,981	US 7,747,583	US	History Preservation in a Computer Storage System	7-Jan-2004	29-Jun-2010	Norman H. Margolus; Jered J. Floyd; George E. Homsey II; Jeffrey M. Keller	Permabit Technology Corporation

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11/240,829	US 7,293,027	US	History Preservation in a Computer Storage System	7-Jan-2004	6-Nov-2007	Norman H. Margolus	Permabit Technology Corporation
11/246,004	US 7,457,800	US	Storage System for Randomly Named Blocks of Data	30-Sep-2005	25-Nov-2008	Norman H. Margolus; Edwin Olson; Michael Sclafani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
11/246,897	US 7,457,813	US	Storage System for Randomly Named Blocks of Data	30-Sep-2005	25-Nov-2008	Norman H. Margolus; Edwin Olson; Michael Sclafani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
12/953,901	US RE 45350	US	Storage System for Randomly Named Blocks of Data	24-Nov-2010	20-Jan-2015	Norman H. Margolus; Edwin Olson; Michael Sclafani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
2007-535813	JP 4,932,726	JP	Storage System for Randomly Named Blocks of Data	6-Oct-2005	16-May-2012	Norman H. Margolus; Edwin Olson; Michael Sclafani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
11/696,644	US 8,364,891	US	Storage Assignment Technique for Scalable and Fault Tolerant Storage System	4-Apr-2007	29-Jan-2013	Norman H. Margolus; Jonathan Coburn	Permabit Technology Corporation
11/696,654	US 7,979,771	US	Erasure Coding Technique for Scalable and Fault Tolerant Storage System	4-Apr-2007	12-Jul-2011	Norman H. Margolus; Thomas Jaskiewicz	Permabit Technology Corporation
2009-504455	JP 5,167,243	JP	Storage Assignment and Erasure Coding Technique for Scalable and Fault Tolerant Storage System	4-Apr-2007	21-Mar-2013	Norman H. Margolus; Jonathan Coburn; Thomas Jaskiewicz	Permabit Technology Corporation
13/117,629	US 8,463,742	US	Managing Deduplication of Stored Data	27-May-2011	11-Jun-2013	Jerred J. Floyd; Michael Fortson; Assar Westerlund; Jonathan Coburn	Permabit Technology Corporation

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13/887,558	US 8,898,107	US	Managing Deduplication of Stored Data	6-May-2013	25-Nov-2014	Jered J. Floyd; Michael Fortson; Assar Westerlund; Jonathan Coburn	Permabit Technology Corporation
13/288,440	US 9,069,707	US	Indexing Deduplicated Data	3-Nov-2011	30-Jun-2015	Michael Fortson; Jonathan Coburn; Michael Scalfani; Thomas Jaskiewicz; Assar Westerlund; Hoonan Vassef	Permabit Technology Corporation
13/800,837	US 9,092,151	US	Managing Deduplication of Stored Data	13-Mar-2013	28-Jul-2015	Jered J. Floyd; Michael Fortson; Assar Westerlund; Jonathan Coburn	Permabit Technology Corporation
14/462,263	US 9,483,199	US	Data Deduplication Using Multiple Devices	18-Aug-2014	1-Nov-2016	Jered J. Floyd	Permabit Technology Corporation

Patent Applications

<i>Appl. #</i>	<i>Patent #</i>	<i>Loc.</i>	<i>Title</i>	<i>Filing Date</i>	<i>Issue Date</i>	<i>Inventors</i>	<i>Owner</i>
10/966,843	n/a	US	Data repository and method for promoting network storage of data	14-Oct-2004	n/a	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; George E. Hornsy II	Permabit Technology Corporation
10/967,705	n/a	US	Data repository and method for promoting network storage of data	14-Oct-2004	n/a	Norman H. Margolus; Thomas F. Knight, Jr.; Jered J. Floyd; George E. Hornsy II	Permabit Technology Corporation
PCT/US01/05355	n/a	PCT	Data repository and method for promoting network storage of data	20-Feb-2001	n/a	Norman H. Margolus; Thomas F. Knight; Bruce Boghosian	Permabit Technology Corporation

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14/822,443	n/a	US	History Preservation in a Computer Storage System	10-Aug-2015	n/a	Norman H. Margolus	Permabit Technology Corporation
60/616,653	n/a	US	Storage System for Randomly Named Blocks of Data	6-Oct-2004	n/a	Norman H. Margolus; Edwin Olson; Michael Selaiani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
PCT/US2005/035994	n/a	PCT	Storage System for Randomly Named Blocks of Data	30-Sep-2005	n/a	Norman H. Margolus; Edwin Olson; Michael Selaiani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
5808531.7	n/a	EU	Storage System for Randomly Named Blocks of Data	6-Oct-2005	n/a	Norman H. Margolus; Edwin Olson; Michael Selaiani; J. Corwin Coburn; Michael Fortson	Permabit Technology Corporation
60/789,016	n/a	US	Storage Assignment Technique for Scalable and Fault Tolerant Storage System	4-Apr-2006	n/a	Norman H. Margolus; Jonathan Coburn	Permabit Technology Corporation
PCT/US2007/065989	n/a	PCT	Storage Assignment and Erasure Coding Technique for Scalable and Fault Tolerant Storage System	4-Apr-2007	n/a	Norman H. Margolus; Jonathan Coburn; Thomas Jaskiewicz	Permabit Technology Corporation
7760124.3	n/a	EU	Storage Assignment and Erasure Coding Technique for Scalable and Fault Tolerant Storage System	4-Apr-2007	n/a	Norman H. Margolus; Jonathan Coburn; Thomas Jaskiewicz	Permabit Technology Corporation
61/384,212	n/a	US	Managing Deduplication of Stored Data	17-Sep-2010	n/a	Jerred J. Floyd	Permabit Technology Corporation

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14/696,564	n/a	US	Indexing Deduplicated Data	27-Apr-2015	n/a	Michael Fortson; Jonathan Coburn; Michael Scifani; Thomas Jaskiewicz; Assar Westerlund; Hooman Vassef	Permabit Technology Corporation
13/782,836	n/a	US	Managing a Deduplicated Data Index	1-Mar-2013	n/a	Jonathan Coburn; Michael Fortson	Permabit Technology Corporation
15/004,217	n/a	US	Variable Deduplication of Data on Fixed Size Storage	22-Jan-2016	n/a	Jered J Floyd; Norman Margolus	Permabit Technology Corporation

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RECORDED: 09/19/2017