

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4372743

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the APPLICATION NUMBER 13/696,155 TO 13/698,155 FOR REMOVING THE ORIGINAL ASSIGNMENT FROM THE APPLICATION FOR 13/696,155 previously recorded on Reel 029619 Frame 0619. Assignor(s) hereby confirms the ORIGINAL ASSIGNMENT RECORDED WITH INCORRECT APPLICATION NUMBER SUBMITTED BY OTHER NEEDS TO BE REMOVED.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BERNHARD SCHRADER	12/06/2012
VAN SON NGUYEN	12/07/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	FUJITSU LIMITED
<b>Street Address:</b>	1-1, Kamikodanaka 4-chome, Nakahara-ku
<b>City:</b>	Kawasaki-shi, Kanagawa
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	211-8588
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13696155
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)535-8420
<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>	703-535-3960
<b>Email:</b>	assignments@system.foundationip.com
<b>Correspondent Name:</b>	FUJITSU PATENT CENTER
<b>Address Line 1:</b>	2318 MILL ROAD
<b>Address Line 4:</b>	ALEXANDRIA, VIRGINIA 22314
<b>ATTORNEY DOCKET NUMBER:</b>	FTS.11-00749
<b>NAME OF SUBMITTER:</b>	TIEP H NGUYEN
<b>SIGNATURE:</b>	/Tiep H Nguyen/
<b>DATE SIGNED:</b>	04/18/2017
<b>Total Attachments: 19</b>	
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## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Michael Binks</td> <td>06/18/2011</td> </tr> <tr> <td>Charles John Cox</td> <td>06/03/2011</td> </tr> <tr> <td>Marion Catherine Dickson</td> <td>06/02/2011</td> </tr> </tbody> </table>		Name	Execution Date	Michael Binks	06/18/2011	Charles John Cox	06/03/2011	Marion Catherine Dickson	06/02/2011				
Name	Execution Date												
Michael Binks	06/18/2011												
Charles John Cox	06/03/2011												
Marion Catherine Dickson	06/02/2011												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>Glaxo Group Limited</td> </tr> <tr> <td>Street Address:</td> <td>Glaxo Wellcome House</td> </tr> <tr> <td>Internal Address:</td> <td>Berkeley Avenue</td> </tr> <tr> <td>City:</td> <td>Greenford, Middlesex</td> </tr> <tr> <td>State/Country:</td> <td>UNITED KINGDOM</td> </tr> <tr> <td>Postal Code:</td> <td>UB6 0NN</td> </tr> </table>		Name:	Glaxo Group Limited	Street Address:	Glaxo Wellcome House	Internal Address:	Berkeley Avenue	City:	Greenford, Middlesex	State/Country:	UNITED KINGDOM	Postal Code:	UB6 0NN
Name:	Glaxo Group Limited												
Street Address:	Glaxo Wellcome House												
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PROPERTY NUMBERS Total: 1 (INCORRECT)													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td><del>13696155</del> 13/698,155</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	<del>13696155</del> 13/698,155								
Property Type	Number												
Application Number:	<del>13696155</del> 13/698,155												
CORRESPONDENCE DATA													
<p>Fax Number: 9194837977  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 919-483-2370        Email: uscprtp@gsk.com        Correspondent Name: GlaxoSmithKline, Corporate Intellectual        Address Line 1: Five Moore Drive, P.O. Box 13398        Address Line 2: Bide C2111.2F        Address Line 4: Research Triangle Pa, NORTH CAROLINA 27709-3398</p>													
ATTORNEY DOCKET NUMBER:	PB64253T (RHB)												
NAME OF SUBMITTER:	Valerie L. Phillips												
Total Attachments: 9													

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PATENT  
 REEL: 029619 FRAME: 0619  
 PATENT  
 REEL: 042278 FRAME: 0332

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P2010,0921 US N (MN/WS)  
EHF-12-1326

ASSIGNMENT

WHEREAS, we, Bernhard Schröder and Van Son Nguyen, citizens of Germany, residing at Untereichen 10, 33129 Delbrück, Germany and Zum Fensterberg 10, 48231 Warendorf, Germany, respectively (hereinafter referred to as "the undersigned"), having made an invention entitled RACK HOUSING TO HOLD A PLURALITY OF INSERTION COMPONENTS, identified in International Application No. PCT/EP2011/053610, and in US Application No. 13/696,155 (DLA Piper is authorized to insert the Serial No. when known),

WHEREAS, Fujitsu Technology Solutions Intellectual Property GmbH, with offices located at Mies-van-der-Rohe-Str. 8, 80807 München, Germany (hereinafter referred to as "the assignee"), is desirous of acquiring the entire right, title and interest in said invention, said US application and all letters patent issuing for said invention,


NOW, THEREFORE, in consideration of One Dollar (\$1.00) and of other good and valuable consideration, receipt of which is hereby acknowledged, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to the assignee the entire right, title and interest, for the United States of America, its territories and possessions, and for all foreign countries, in said invention, including said US application, all divisions and continuations thereof, all rights to claim priority based thereon, all rights to file foreign applications on said invention, and all letters patent and reissues thereof, issuing for said invention in the United States of America and in any and all foreign countries.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, or its successors or assigns or a legal representative thereof, to supply all information and evidence of which the undersigned has knowledge or possession, relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America and foreign countries in the name of the assignee, and to execute all instruments proper to carry out the intent of this instrument. If the undersigned includes more than one individual, these obligations shall apply to all of the undersigned both individually and collectively.

The rights and property herein conveyed by the undersigned are free and clear of any encumbrance.

EXECUTED on the date(s) set forth below.

6.12.2012  
Date

  
Bernhard Schröder

\_\_\_\_\_  
Date

\_\_\_\_\_  
Van Son Nguyen

P2010,0921 US N (MN/WS)  
EHF-12-1326

**ASSIGNMENT**

WHEREAS, we, Bernhard Schröder and Van Son Nguyen, citizens of Germany, residing at Untereichen 10, 33129 Delbrück, Germany and Zum Fensterberg 10, 48231 Warendorf, Germany, respectively (hereinafter referred to as "the undersigned"), having made an invention entitled RACK HOUSING TO HOLD A PLURALITY OF INSERTION COMPONENTS, identified in International Application No. PCT/EP2011/053610, and in US Application No. 13/696,155 (DLA Piper is authorized to insert the Serial No. when known),

WHEREAS, Fujitsu Technology Solutions Intellectual Property GmbH, with offices located at Mies-van-der-Rohe-Str. 8, 80807 München, Germany (hereinafter referred to as "the assignee"), is desirous of acquiring the entire right, title and interest in said invention, said US application and all letters patent issuing for said invention,

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It is agreed that the undersigned shall be legally bound, upon request of the assignee, or its successors or assigns or a legal representative thereof, to supply all information and evidence of which the undersigned has knowledge or possession, relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America and foreign countries in the name of the assignee, and to execute all instruments proper to carry out the intent of this instrument. If the undersigned includes more than one individual, these obligations shall apply to all of the undersigned both individually and collectively.

The rights and property herein conveyed by the undersigned are free and clear of any encumbrance.

**EXECUTED** on the date(s) set forth below.

\_\_\_\_\_  
Date

07.12.2012  
Date

\_\_\_\_\_  
Bernhard Schröder

  
\_\_\_\_\_  
Van Son Nguyen

# PATENT ASSIGNMENT

WHEREAS Fujitsu Technology Solutions Intellectual Property GmbH (hereinafter "Assignor") was the owner of the entire right, title and interest in and to the United States Patents and United States Patent Applications set forth below (hereinafter "the Patent Properties");

Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00711	12/535,611	Aug 4, 2009	Heinrichs	SERVER HAVING AN INTERFACE FOR CONNECTING TO A SERVER SYSTEM AND SERVER SYSTEM	8,938,538
11-00725	12/463,314	May 8, 2009	Depta	OPERATING METHOD FOR A MEMORY SUBSYSTEM AND DEVICES FOR EXECUTING THE OPERATING METHOD	8,140,747
11-00729	12/957,944	Dec 1, 2010	Fietz	DATA PROCESSING SYSTEM	8,089,779
11-00737B	13/305,269	Nov 28, 2011	Heinrichs	APPARATUS AND METHOD FOR CONTROLLING A COMPUTER SYSTEM WITH AT LEAST TWO POWER SUPPLY UNITS	9,047,360
11-00737	13/132,238	Jul 14, 2011	Heinrichs	ASSEMBLY WITH AT LEAST TWO POWER SUPPLY UNITS AND AT LEAST ONE POWER-CONSUMING COMPONENT, COMPUTER SYSTEM AND METHOD FOR CONTROL OF AN ASSEMBLY	9,077,203
11-00743	13/275,429	Oct 18, 2011	Riebel	SERVER FRAME AND RACK-MOUNTED SERVER SUITABLE FOR USE IN THE SERVER FRAME	8,755,191
11-00744	12/816,361	June 15, 2010	Depta	METHOD FOR ADAPTING THE SIGNAL TRANSMISSION BETWEEN TWO ELECTRONIC DEVICES, AS WELL AS ARRANGEMENT WITH A COMPUTER SYSTEM AND A PERIPHERAL DEVICE	8,150,331
11-00749	13/696,155	Jan 7, 2013	Schrader	RACK HOUSING TO HOLD A PLURALITY OF INSERTION COMPONENTS	
11-00750	13/107,170	May 23, 2011	Scheidler	RACK HOUSING FOR ACCOMMODATING A PLURALITY OF FANLESS, PLUG-IN COMPONENTS	8,508,940

Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00751	13/697,430	Jan 10, 2013	Koberling	DOOR ASSEMBLY FOR AN INSTRUMENT CABINET AND METHOD FOR CHANGING A HINGE SIDE OF A DOOR ASSEMBLY	8,695,278
11-00757	13/818,503	April 8, 2013	Busch	CLOSED-LOOP CONTROL CIRCUIT FOR AN AUXILIARY POWER SUPPLY UNIT AND POWER SUPPLY UNIT ARRANGEMENT	9,178,436
11-00761	13/287,209	Nov 2, 2011	Scheidler	COOLING ARRANGEMENT AND METHOD OF OPERATION FOR A FAN CONTROL	9,060,450
11-00772	14/008,261	Oct 18, 2013	Lueck	RACK, SERVER AND ASSEMBLY COMPRISING SUCH A RACK AND AT LEAST ONE SERVER	
11-00781	14/232,055	Mar 13, 2014	Sudhoff-Ewers	COMPUTER SYSTEM, METHOD FOR STARTING A SERVER COMPUTER, SERVER COMPUTER, MANAGEMENT STATION, AND USE	
11-00782	14/236,939	Mar 5, 2014	Weidner	SERVER AND METHOD FOR COOLING A SERVER	9,386,728
11-00789	14/353,905	May 28, 2014	Schelshorn	FLOW-GUIDING HOOD FOR GUIDING A FLOW OF AIR	9,298,229
11-00791	14/354,641	April 28, 2014	Koehler	COMPUTER HOUSING AND ARRANGEMENT	9,448,582
11-00794	14/356,236	May 5, 2014	Muehsam	SERVER SYSTEM AND METHOD FOR TRANSFERRING AT LEAST ONE CHASSIS-SPECIFIC CONFIGURATION VALUE	
11-00800	14/385,302	Sep 15, 2014	Kleineberg	MODULAR SERVER SYSTEM, I/O MODULE AND SWITCHING METHOD	
11-00808	14/418,498	Jan 30, 2015	Winkelstraeter	HIGH-AVAILABILITY COMPUTER SYSTEM, WORKING METHOD AND THE USE THEREOF	
11-00810	14/424,225	Feb 26, 2015	Clemens	DETERMINATION OF A SUBSTITUTE VALUE FOR THE PRIMARY-SIDE POWER CONSUMPTION OF A POWER SUPPLY UNIT	
11-00811	14/424,227	Feb 26, 2015	Kasper	WORKING METHOD FOR A MASS STORAGE SYSTEM, MASS STORAGE SYSTEM AND COMPUTER PROGRAM PRODUCT	
11-00815	14/435,232	Apr 13, 2015	Treffler	ARRANGEMENT FOR A COMPUTER SYSTEM AND COMPUTER SYSTEM	
11-00816	14/437,735	Apr 22, 2015	Werner	DATA STORAGE ARRANGEMENT	

Assignment From FTSIP to Fujitsu Limited

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Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00818	14/084,664	Nov 20, 2013	Koenig	STORAGE SYSTEM, CLOUD STORAGE SYSTEM, AND COMPUTER PROGRAM PRODUCT	
11-00821	14/161,752	Jan 23, 2014	Werner	METHOD FOR PROVIDING A USER INTERFACE, COMPUTER SYSTEM AND COMPUTER PROGRAM PRODUCT	
11-00826	14/427,104	Mar 10, 2015	Fietz	ARRANGEMENT FOR A BLADE SERVER SLIDE-IN MODULE	
11-00829	14/655,072	Jun 24, 2015	Kartheininger	ASSEMBLE FOR A COMPUTER SYSTEM AND ANGLE PLUG	
11-00832	14/913,401	Feb 22, 2016	Koehler	SERVER INSERT FOR A SERVER RACK	
11-00833	14/471,704	Aug 28, 2014	Chopra	METHOD AND SYSTEMS FOR SIMULATING A WORKLOAD OF A STORAGE SYSTEM	
11-00835	14/649,007	Jun 2, 2015	Clemens	COMPUTER SYSTEM, A SYSTEM MANAGEMENT MODULE AND METHOD OF BIDIRECTIONALLY INTERCHANGING DATA	
11-00840	15/033,265	June 30, 2014	Schuster	STORAGE APPLIANCE AND METHOD THEREOF FOR INLINE DEPLICATION WITH SEGMENTATION	
11-00842	14/761,413	Jul 16, 2015	Koenig	POSIX-COMPATIBLE FILE SYSTEM, METHOD OF CREATING A FILE LIST AND STORAGE DEVICE	
11-00859	14/930,703	Nov 3, 2015	Stefanowicz	METHODS OF RESTORING DATA, METHOD OF STORING DATA AND TAPE STORAGE SYSTEM	
11-00868	14/707,038	May 8, 2015	Riedisser	METHODS OF UPDATING SOFTWARE COMPONENTS, COMPUTER SYSTEMS AND MEMORY APPARATUS	
11-00869	14/713,017	May 15, 2015	Riedisser	METHODS OF UPDATING FIRMWARE COMPONENTS, COMPUTER SYSTEMS AND MEMORY APPARATUS	
11-00870	14/718,263	May 21, 2015	Riedisser	METHOD OF PROVIDING AT LEAST ONE DATA CARRIER, COMPUTER SYSTEM AND MEMORY DEVICE	

WHEREAS Fujitsu Limited (hereinafter "Assignee"), acquired from Assignor all rights, title, and interest in and to the Patent Properties as of MARCH 31st 2016; and

WHEREAS, Assignor and Assignee wish to ratify and confirm the transfer of ownership of the all rights, title, and interest in and to the Patent Properties, *nunc pro tunc*;

Assignment From FTSIP to Fujitsu Limited

Page 3 of 4

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over the Assignee, *nunc pro tunc*, effective as of 31st of March, 2016, the entire exclusive rights, titles and interests in and to the Patent Properties, including the right to sue for past infringement, if any, and all rights pursuant to 35 U.S.C. 154 thereto (including any provisional application or applications upon which the Patent Properties may be based), and including any continuations, divisionals, substitutes, reissues, reexaminations, supplemental examinations, inter partes reviews, post grant reviews, and other procedures thereof, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assignees to the full end of the term for which the Patent Properties will be or have been granted as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment had not been made. This Assignment shall be binding upon the Assignor and Assignee, their successors and/or assigns, and all others acting by, through, with, or under, their direction, and all those in privity therewith.

**FURTHER**, Assignor agrees to communicate to Assignee, or its representatives, any facts known to Assignor with regard to the Patent Properties, and to testify in any legal proceedings, sign all lawful papers, execute all applications pertaining to the Patent Properties, execute all necessary assignment papers, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain, maintain, and enforce proper protection for the Patents in the United States.

This assignment is executed this 6 day of December, 2016.

**Fujitsu Technology Solutions Intellectual Property GmbH**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Assignment From FTSIP to Fujitsu Limited  
Page 4 of 4



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

FEBRUARY 24, 2017

PTAS

FUJITSU PATENT CENTER  
2318 MILL ROAD SW  
SUITE 1420  
ALEXANDRIA, VA 22314

**504240853**

### UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 02/23/2017

REEL/FRAME: 041353/0914

NUMBER OF PAGES: 6

BRIEF: NUNC PRO TUNC ASSIGNMENT (SEE DOCUMENT FOR DETAILS).

#### ASSIGNOR:

FUJITSU TECHNOLOGY SOLUTIONS  
INTELLECTUAL PROPERTY GMBH

DOC DATE: 12/06/2016

#### ASSIGNEE:

FUJITSU LIMITED  
1-1, KAMIKODANAKA 4-CHOME,  
NAKAHARA-KU, KAWASAKI-SHI, KANAGAWA,  
JAPAN 211-8588

APPLICATION NUMBER: 12463314

FILING DATE: 05/08/2009

PATENT NUMBER: 8140747

ISSUE DATE: 03/20/2012

TITLE: OPERATING METHOD FOR A MEMORY SUBSYSTEM AND DEVICES FOR  
EXECUTING THE OPERATING METHOD

APPLICATION NUMBER: 12535611

FILING DATE: 08/04/2009

PATENT NUMBER: 8938538

ISSUE DATE: 01/20/2015

TITLE: SERVER HAVING AN INTERFACE FOR CONNECTING TO A SERVER SYSTEM AND  
SERVER SYSTEM

APPLICATION NUMBER: 12816361 FILING DATE: 06/15/2010  
PATENT NUMBER: 8150331 ISSUE DATE: 04/03/2012  
TITLE: METHOD FOR ADAPTING THE SIGNAL TRANSMISSION BETWEEN TWO  
ELECTRONIC DEVICES, AS WELL AS ARRANGEMENT WITH A COMPUTER  
SYSTEM AND A PERIPHERAL DEVICE

APPLICATION NUMBER: 12957944 FILING DATE: 12/01/2010  
PATENT NUMBER: 8089779 ISSUE DATE: 01/03/2012  
TITLE: DATA PROCESSING SYSTEM

APPLICATION NUMBER: 13107170 FILING DATE: 05/13/2011  
PATENT NUMBER: 8508940 ISSUE DATE: 08/13/2013  
TITLE: RACK HOUSING FOR ACCOMMODATING A PLURALITY OF FANLESS, PLUG-IN  
COMPONENTS

APPLICATION NUMBER: 13132238 FILING DATE: 07/14/2011  
PATENT NUMBER: 9077203 ISSUE DATE: 07/07/2015  
TITLE: ASSEMBLY WITH AT LEAST TWO POWER SUPPLY UNITS AND AT LEAST ONE  
POWER-CONSUMING COMPONENT, COMPUTER SYSTEM AND METHOD FOR  
CONTROL OF AN ASSEMBLY

APPLICATION NUMBER: 13275429 FILING DATE: 10/18/2011  
PATENT NUMBER: 8755191 ISSUE DATE: 06/17/2014  
TITLE: SERVER FRAME AND RACK-MOUNTED SERVER SUITABLE FOR USE IN THE  
SERVER FRAME

APPLICATION NUMBER: 13287209 FILING DATE: 11/02/2011  
PATENT NUMBER: 9060450 ISSUE DATE: 06/16/2015  
TITLE: COOLING ARRANGEMENT AND METHOD OF OPERATION FOR A FAN CONTROL

APPLICATION NUMBER: 13305269 FILING DATE: 11/28/2011  
PATENT NUMBER: 9047360 ISSUE DATE: 06/02/2015  
TITLE: APPARATUS AND METHOD FOR CONTROLLING A COMPUTER SYSTEM WITH AT  
LEAST TWO POWER SUPPLY UNITS

APPLICATION NUMBER: 13696155 CORRECT FILING DATE: 01/07/2013  
PATENT NUMBER: 9596781 ISSUE DATE: 03/14/2017  
TITLE: RACK HOUSING TO HOLD A PLURALITY OF INSERTION COMPONENTS

APPLICATION NUMBER: 13697430 FILING DATE: 01/10/2013  
PATENT NUMBER: 8695278 ISSUE DATE: 04/15/2014  
TITLE: DOOR ASSEMBLY FOR AN INSTRUMENT CABINET AND METHOD FOR CHANGING  
A HINGE SIDE OF A DOOR ASSEMBLY

APPLICATION NUMBER: 13818503 FILING DATE: 04/08/2013  
PATENT NUMBER: 9178436 ISSUE DATE: 11/03/2015  
TITLE: CLOSED-LOOP CONTROL CIRCUIT FOR AN AUXILIARY POWER SUPPLY UNIT  
AND POWER SUPPLY UNIT ARRANGEMENT

APPLICATION NUMBER: 14008261 FILING DATE: 10/18/2013  
PATENT NUMBER: 9582450 ISSUE DATE: 02/28/2017  
TITLE: RACK, SERVER AND ASSEMBLY COMPRISING SUCH A RACK AND AT LEAST  
ONE SERVER

APPLICATION NUMBER: 14084664 FILING DATE: 11/20/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: STORAGE SYSTEM, CLOUD STORAGE SYSTEM, AND COMPUTER PROGRAM  
PRODUCT

APPLICATION NUMBER: 14161752 FILING DATE: 01/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR PROVIDING A USER INTERFACE, COMPUTER SYSTEM AND  
COMPUTER PROGRAM PRODUCT

APPLICATION NUMBER: 14232055 FILING DATE: 03/13/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: COMPUTER SYSTEM, METHOD FOR STARTING A SERVER COMPUTER, SERVER  
COMPUTER, MANAGEMENT STATION, AND USE

APPLICATION NUMBER: 14236939 FILING DATE: 03/05/2014  
PATENT NUMBER: 9386728 ISSUE DATE: 07/05/2016  
TITLE: SERVER AND METHOD FOR COOLING A SERVER

APPLICATION NUMBER: 14353905 FILING DATE: 05/28/2014  
PATENT NUMBER: 9298229 ISSUE DATE: 03/29/2016  
TITLE: FLOW-GUIDING HOOD FOR GUIDING A FLOW OF AIR

APPLICATION NUMBER: 14354641 FILING DATE: 04/28/2014  
PATENT NUMBER: 9448582 ISSUE DATE: 09/20/2016  
TITLE: COMPUTER HOUSING AND ARRANGEMENT

APPLICATION NUMBER: 14356236 FILING DATE: 05/05/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SERVER SYSTEM AND METHOD FOR TRANSFERRING AT LEAST ONE  
CHASSIS-SPECIFIC CONFIGURATION VALUE

APPLICATION NUMBER: 14385302 FILING DATE: 09/15/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MODULAR SERVER SYSTEM, I/O MODULE AND SWITCHING METHOD

APPLICATION NUMBER: 14418498 FILING DATE: 01/30/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: HIGH-AVAILABILITY COMPUTER SYSTEM, WORKING METHOD AND THE USE  
THEREOF

APPLICATION NUMBER: 14424225 FILING DATE: 02/26/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: DETERMINATION OF A SUBSTITUTE VALUE FOR THE PRIMARY-SIDE POWER  
CONSUMPTION OF A POWER SUPPLY UNIT

APPLICATION NUMBER: 14424227 FILING DATE: 02/26/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: WORKING METHOD FOR A MASS STORAGE SYSTEM, MASS STORAGE SYSTEM  
AND COMPUTER PROGRAM PRODUCT

APPLICATION NUMBER: 14427104 FILING DATE: 03/10/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: ARRANGEMENT FOR A BLADE SERVER SLIDE-IN MODULE

APPLICATION NUMBER: 14435232 FILING DATE: 04/13/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: ARRANGEMENT FOR A COMPUTER SYSTEM AND COMPUTER SYSTEM

APPLICATION NUMBER: 14437735 FILING DATE: 04/22/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: DATA STORAGE ARRANGEMENT

APPLICATION NUMBER: 14471704 FILING DATE: 08/28/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD AND SYSTEMS FOR SIMULATING A WORKLOAD OF A STORAGE SYSTEM

APPLICATION NUMBER: 14649007 FILING DATE: 06/02/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: COMPUTER SYSTEM, A SYSTEM MANAGEMENT MODULE AND METHOD OF  
BIDIRECTIONALLY INTERCHANGING DATA

APPLICATION NUMBER: 14655072 FILING DATE: 06/24/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: ASSEMBLY FOR A COMPUTER SYSTEM AND ANGLE PLUG

APPLICATION NUMBER: 14707038 FILING DATE: 05/08/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHODS OF UPDATING SOFTWARE COMPONENTS, COMPUTER SYSTEMS AND  
MEMORY APPARATUS

APPLICATION NUMBER: 14713017 FILING DATE: 05/15/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHODS OF UPDATING FIRMWARE COMPONENTS, COMPUTER SYSTEMS AND  
MEMORY APPARATUS

APPLICATION NUMBER: 14718263 FILING DATE: 05/21/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD OF PROVIDING AT LEAST ONE DATA CARRIER, COMPUTER SYSTEM  
AND MEMORY DEVICE

APPLICATION NUMBER: 14761413 FILING DATE: 07/16/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: POSIX-COMPATIBLE FILE SYSTEM, METHOD OF CREATING A FILE LIST AND  
STORAGE DEVICE

APPLICATION NUMBER: 14913401 FILING DATE: 02/22/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SERVER INSERT FOR A SERVER RACK

APPLICATION NUMBER: 14930703 FILING DATE: 11/03/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHODS OF RESTORING DATA, METHOD OF STORING DATA AND TAPE  
STORAGE SYSTEM

APPLICATION NUMBER: 15033265 FILING DATE: 04/29/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: STORAGE APPLIANCE AND METHOD OF SEGMENTATION

ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

# PATENT ASSIGNMENT

WHEREAS Fujitsu Technology Solutions Intellectual Property GmbH (hereinafter "Assignor") was the owner of the entire right, title and interest in and to the United States Patents and United States Patent Applications set forth below (hereinafter "the Patent Properties");

Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00711	12/535,611	Aug 4, 2009	Heinrichs	SERVER HAVING AN INTERFACE FOR CONNECTING TO A SERVER SYSTEM AND SERVER SYSTEM	8,938,538
11-00725	12/463,314	May 8, 2009	Depta	OPERATING METHOD FOR A MEMORY SUBSYSTEM AND DEVICES FOR EXECUTING THE OPERATING METHOD	8,140,747
11-00729	12/957,944	Dec 1, 2010	Fietz	DATA PROCESSING SYSTEM	8,089,779
11-00737B	13/305,269	Nov 28, 2011	Heinrichs	APPARATUS AND METHOD FOR CONTROLLING A COMPUTER SYSTEM WITH AT LEAST TWO POWER SUPPLY UNITS	9,047,360
11-00737	13/132,238	Jul 14, 2011	Heinrichs	ASSEMBLY WITH AT LEAST TWO POWER SUPPLY UNITS AND AT LEAST ONE POWER-CONSUMING COMPONENT, COMPUTER SYSTEM AND METHOD FOR CONTROL OF AN ASSEMBLY	9,077,203
11-00743	13/275,429	Oct 18, 2011	Riebel	SERVER FRAME AND RACK-MOUNTED SERVER SUITABLE FOR USE IN THE SERVER FRAME	8,755,191
11-00744	12/816,361	June 15, 2010	Depta	METHOD FOR ADAPTING THE SIGNAL TRANSMISSION BETWEEN TWO ELECTRONIC DEVICES, AS WELL AS ARRANGEMENT WITH A COMPUTER SYSTEM AND A PERIPHERAL DEVICE	8,150,331
11-00749	13/696,155	Jan 7, 2013	Schrader	RACK HOUSING TO HOLD A PLURALITY OF INSERTION COMPONENTS	
11-00750	13/107,170	May 23, 2011	Scheidler	RACK HOUSING FOR ACCOMMODATING A PLURALITY OF FANLESS, PLUG-IN COMPONENTS	8,508,940

Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00751	13/697,430	Jan 10, 2013	Koberling	DOOR ASSEMBLY FOR AN INSTRUMENT CABINET AND METHOD FOR CHANGING A HINGE SIDE OF A DOOR ASSEMBLY	8,695,278
11-00757	13/818,503	April 8, 2013	Busch	CLOSED-LOOP CONTROL CIRCUIT FOR AN AUXILIARY POWER SUPPLY UNIT AND POWER SUPPLY UNIT ARRANGEMENT	9,178,436
11-00761	13/287,209	Nov 2, 2011	Scheidler	COOLING ARRANGEMENT AND METHOD OF OPERATION FOR A FAN CONTROL	9,060,450
11-00772	14/008,261	Oct 18, 2013	Lueck	RACK, SERVER AND ASSEMBLY COMPRISING SUCH A RACK AND AT LEAST ONE SERVER	
11-00781	14/232,055	Mar 13, 2014	Sudhoff-Ewers	COMPUTER SYSTEM, METHOD FOR STARTING A SERVER COMPUTER, SERVER COMPUTER, MANAGEMENT STATION, AND USE	
11-00782	14/236,939	Mar 5, 2014	Weidner	SERVER AND METHOD FOR COOLING A SERVER	9,386,728
11-00789	14/353,905	May 28, 2014	Schelshorn	FLOW-GUIDING HOOD FOR GUIDING A FLOW OF AIR	9,298,229
11-00791	14/354,641	April 28, 2014	Koehler	COMPUTER HOUSING AND ARRANGEMENT	9,448,582
11-00794	14/356,236	May 5, 2014	Muehsam	SERVER SYSTEM AND METHOD FOR TRANSFERRING AT LEAST ONE CHASSIS-SPECIFIC CONFIGURATION VALUE	
11-00800	14/385,302	Sep 15, 2014	Kleineberg	MODULAR SERVER SYSTEM, I/O MODULE AND SWITCHING METHOD	
11-00808	14/418,498	Jan 30, 2015	Winkelstraeter	HIGH-AVAILABILITY COMPUTER SYSTEM, WORKING METHOD AND THE USE THEREOF	
11-00810	14/424,225	Feb 26, 2015	Clemens	DETERMINATION OF A SUBSTITUTE VALUE FOR THE PRIMARY-SIDE POWER CONSUMPTION OF A POWER SUPPLY UNIT	
11-00811	14/424,227	Feb 26, 2015	Kasper	WORKING METHOD FOR A MASS STORAGE SYSTEM, MASS STORAGE SYSTEM AND COMPUTER PROGRAM PRODUCT	
11-00815	14/435,232	Apr 13, 2015	Treffler	ARRANGEMENT FOR A COMPUTER SYSTEM AND COMPUTER SYSTEM	
11-00816	14/437,735	Apr 22, 2015	Werner	DATA STORAGE ARRANGEMENT	

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Fuj. Ref.	App. No.	Filing Date	Inventor	Title	Patent No.
11-00818	14/084,664	Nov 20, 2013	Koenig	STORAGE SYSTEM, CLOUD STORAGE SYSTEM, AND COMPUTER PROGRAM PRODUCT	
11-00821	14/161,752	Jan 23, 2014	Werner	METHOD FOR PROVIDING A USER INTERFACE, COMPUTER SYSTEM AND COMPUTER PROGRAM PRODUCT	
11-00826	14/427,104	Mar 10, 2015	Fietz	ARRANGEMENT FOR A BLADE SERVER SLIDE-IN MODULE	
11-00829	14/655,072	Jun 24, 2015	Kartheininger	ASSEMBLE FOR A COMPUTER SYSTEM AND ANGLE PLUG	
11-00832	14/913,401	Feb 22, 2016	Koehler	SERVER INSERT FOR A SERVER RACK	
11-00833	14/471,704	Aug 28, 2014	Chopra	METHOD AND SYSTEMS FOR SIMULATING A WORKLOAD OF A STORAGE SYSTEM	
11-00835	14/649,007	Jun 2, 2015	Clemens	COMPUTER SYSTEM, A SYSTEM MANAGEMENT MODULE AND METHOD OF BIDIRECTIONALLY INTERCHANGING DATA	
11-00840	15/033,265	June 30, 2014	Schuster	STORAGE APPLIANCE AND METHOD THEREOF FOR INLINE DEPLICATION WITH SEGMENTATION	
11-00842	14/761,413	Jul 16, 2015	Koenig	POSIX-COMPATIBLE FILE SYSTEM, METHOD OF CREATING A FILE LIST AND STORAGE DEVICE	
11-00859	14/930,703	Nov 3, 2015	Stefanowicz	METHODS OF RESTORING DATA, METHOD OF STORING DATA AND TAPE STORAGE SYSTEM	
11-00868	14/707,038	May 8, 2015	Riedisser	METHODS OF UPDATING SOFTWARE COMPONENTS, COMPUTER SYSTEMS AND MEMORY APPARATUS	
11-00869	14/713,017	May 15, 2015	Riedisser	METHODS OF UPDATING FIRMWARE COMPONENTS, COMPUTER SYSTEMS AND MEMORY APPARATUS	
11-00870	14/718,263	May 21, 2015	Riedisser	METHOD OF PROVIDING AT LEAST ONE DATA CARRIER, COMPUTER SYSTEM AND MEMORY DEVICE	

WHEREAS Fujitsu Limited (hereinafter "Assignee"), acquired from Assignor all rights, title, and interest in and to the Patent Properties as of MARCH 31st 2016; and

WHEREAS, Assignor and Assignee wish to ratify and confirm the transfer of ownership of the all rights, title, and interest in and to the Patent Properties, *nunc pro tunc*;

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**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over the Assignee, *nunc pro tunc*, effective as of 31st of March, 2016, the entire exclusive rights, titles and interests in and to the Patent Properties, including the right to sue for past infringement, if any, and all rights pursuant to 35 U.S.C. 154 thereto (including any provisional application or applications upon which the Patent Properties may be based), and including any continuations, divisionals, substitutes, reissues, reexaminations, supplemental examinations, inter partes reviews, post grant reviews, and other procedures thereof, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assignees to the full end of the term for which the Patent Properties will be or have been granted as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment had not been made. This Assignment shall be binding upon the Assignor and Assignee, their successors and/or assigns, and all others acting by, through, with, or under, their direction, and all those in privity therewith.

**FURTHER**, Assignor agrees to communicate to Assignee, or its representatives, any facts known to Assignor with regard to the Patent Properties, and to testify in any legal proceedings, sign all lawful papers, execute all applications pertaining to the Patent Properties, execute all necessary assignment papers, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain, maintain, and enforce proper protection for the Patents in the United States.

This assignment is executed this 6 day of December, 2016.

**Fujitsu Technology Solutions Intellectual Property GmbH**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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