

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
DANIELA MAFTULEAC	12/14/2016
ALEJANDRO LOPEZ-ORTIZ	12/14/2016
JEFFREY POUND	12/14/2016
ALEJANDRO SALINGER	12/14/2016
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State/Country:	GERMANY
Postal Code:	D-69190
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15380970
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ATTORNEY DOCKET NUMBER:	54874-233F01US
NAME OF SUBMITTER:	KEVIN C. AMENDT
SIGNATURE:	/Kevin C. Amendt/
DATE SIGNED:	12/19/2016
Total Attachments: 5	
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ASSIGNMENT

We, **Daniela Maftuleac, Alejandro Lopez-Ortiz, Jeffrey Pound and Alejandro Salinger**, the undersigned, hereinafter referred to as the ASSIGNORS, for good and valuable consideration, the receipt of which is hereby acknowledged, confirm that we have sold and assigned, and do hereby assign, sell and transfer to **SAP SE**, a European company, with an office at **Dietmar-Hopp 16, Walldorf, Germany D-69190**, and to its successors, assigns and legal representatives, collectively hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

MULTI-LEVEL DIRECTORY TREE WITH FIXED SUPERBLOCK AND BLOCK SIZES FOR SELECT OPERATIONS ON BIT VECTORS

filed with the U.S. Patent and Trademark Office on December 15, 2016,¹ and assigned U.S. Non-Provisional Patent Application No. 15/380,970,¹ and including any subsequently filed applications in any country of the world, which claim priority to, and/or the benefit of, U.S. Non-Provisional Patent Application No. 15/380,970,¹ and including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications thereof; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my name as the ASSIGNEE, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications.

We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

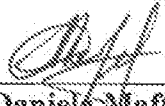
¹ Attorneys at Mintz, Levin, Cohn, Ferris, Glovsky, & Popeo PC are hereby authorized insert the application serial number and filing date upon filing of this patent application in and obtaining this information from the U.S. Patent and Trademark Office.

We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

We hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

We further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: Dec. 14, 2016


Signature of: Daniela Maftuleac

IN WITNESS WHEREOF, I, ROLANDO BLANCO, hereby declare
(Printed Name of Witness)

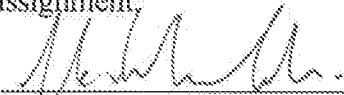
that I was personally present and did see the above named person duly sign and execute the assignment.


(Signature of Witness)

Date: DEC 14th, 2016

IN WITNESS WHEREOF, I, Nathan Auch, hereby declare
(Printed Name of Witness)

that I was personally present and did see the above named person duly sign and execute the assignment.


(Signature of Witness)

Date: Dec 14th, 2016

Date: Dec 14, 2016

Alejandro Lopez-Ortiz
Signature of: Alejandro Lopez-Ortiz

IN WITNESS WHEREOF, I, Scott MacLean, hereby declare
(Printed Name of Witness)

that I was personally present and did see the above named person duly sign and execute the assignment.

Scott MacLean
(Signature of Witness)

Date: 14 Dec/16

IN WITNESS WHEREOF, I, ROLANDO ALANCO, hereby declare
(Printed Name of Witness)

that I was personally present and did see the above named person duly sign and execute the assignment.

R. Alanco
(Signature of Witness)

Date: Dec 14/16 2016

Date: Dec 14, 2016

Signature of: Jeffrey Pound

IN WITNESS WHEREOF, I, ROLANDO BLANCO, hereby declare
(Printed Name of Witness)

that I was personally present and did see the above named person duly sign and execute the assignment.

R. Blanco

(Signature of Witness)

Date: DEC 14th, 2016

IN WITNESS WHEREOF, I, Nathan Arch, hereby declare
(Printed Name of Witness)


that I was personally present and did see the above named person duly sign and execute the assignment.

Nathan Arch

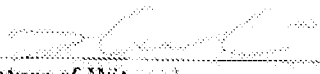
(Signature of Witness)

Date: Dec 14th, 2016

Date: Dec 19th, 2016



Signature of: Alejandro Salinger

IN WITNESS WHEREOF, I, Zhen Li, hereby declare
(Printed Name of Witness)
that I was personally present and did see the above named person duly sign and execute the
assignment.


(Signature of Witness)

Date: 14.12.2016

IN WITNESS WHEREOF, I, Youngho Hwang, hereby declare
(Printed Name of Witness)
that I was personally present and did see the above named person duly sign and execute the
assignment.


(Signature of Witness)

Date: 14.12.2016