504826205 03/19/2018

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date | |
|---------------------|----------------|--|
| CRISTIAN PETCULESCU | 12/26/2013 | |
| AMIR NETZ | 12/29/2013 | |

RECEIVING PARTY DATA

| Name: | MICROSOFT CORPORATION | |
|-----------------|-----------------------|--|
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| City: | REDMOND | |
| State/Country: | WASHINGTON | |
| Postal Code: | 98052 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15925216 |

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| ATTORNEY DOCKET NUMBER: | 13768.2364.1.1 |
|-------------------------|---------------------|
| NAME OF SUBMITTER: | THOMAS M. BONACCI |
| SIGNATURE: | /THOMAS M. BONACCI/ |
| DATE SIGNED: | 03/19/2018 |

Total Attachments: 4

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> PATENT REEL: 045276 FRAME: 0873

504826205

MS Docket No.: <u>340237.01</u> WN Docket No.: <u>13768.2364</u>

I <u>Cristian Petculescu</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>DISK OPTIMIZED PAGING FOR COLUMN ORIENTED DATABASES</u>" ("APPLICATION"), which:

| \times | will | be | filed. | ASSIC | SNOR | hereb | y autho | orizes, | and | reque | ests, |
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| | ASSI | GNEI | E'S legal | repres | entati | ves, of | the Law | and C | orpor | ate Af | fairs |
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| | here | in | parenth | eses (| filed | on <u>De</u> | <u>cember</u> | 30, 2 | <u>013</u> a | and g | iven |
| | App | licati | on No. _. | 14/14 | <u>4,374</u> | by the | followi | ng Offi | ce <u>US</u> | <u> – Un</u> | iited |
| | State | es | Patent | and | <u>Trade</u> | <u>mark</u> | Office) | this | APPL | ICATIO |)N's |
| | App | licati | on No., 1 | filing d | late, a | nd Offi | ce, wher | ı knowı | 1; | | |
| | | | | | | | | | | | |

| \square was filed on $__$ | and was given Application |
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| No | by the following Office |
| u | ". |
| | |

Microsoft Corporation, a Washington Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

| Application No. | Filing Date | Office |
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Page 1 of 2

MS Docket No.: <u>340237.01</u> WN Docket No.: <u>13768.2364</u>

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

| Pha | 12/26/2013 |
|-------------------------|---------------------------------|
| Inventor's Signature | Date |
| Cristian Petculescu | |
| Printed Name in English | Printed Name in Native Language |
| | (if other than English) |

MS Docket No.: <u>340237.01</u> WN Docket No.: <u>13768.2364</u>

I <u>Amir Netz</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>DISK_OPTIMIZED_PAGING_FOR_COLUMN_ORIENTED_DATABASES</u>" ("APPLICATION"), which:

| \boxtimes | will be file | d. ASSIGNOR | hereby | authorizes, | and req | uests, |
|-------------|----------------|-----------------------|-----------------|-------------------|-----------------|---------------|
| | ASSIGNEE'S I | egal representati | ves, of th | e Law and C | orporate / | Affairs |
| | Department, | Microsoft Corpo | ration, Or | ne Microsoft | Way, Red | mond, |
| | Washington 9 | 98052 (ASSIGNEE | 'S LEGAL | REPRESENTA | TIVES), to | insert |
| | here in pare | entheses (filed | on <u>Decer</u> | <u>mber 30, 2</u> | <u>013</u> and | given |
| | Application N | No. <u>14/144,374</u> | by the fo | ollowing Offi | ice <u>US –</u> | <u>United</u> |
| | States Pate | <u>nt and Trade</u> | mark Of | fice) this | APPLICA | ΓΙΟΝ's |
| | Application N | lo., filing date, a | nd Office, | when knowr | า; | |
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MS Docket No.: 340237.01 WN Docket No.: 13768,2364

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Amir Netz

Printed Name in English

Date

Printed Name in Native Language

(if other than English)