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| PATENT ASSIGNMENT COVER SHEET |
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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| YANDEX.TECHNOLOGIES LLC | 11/01/2018 |
| RECEIVING PARTY DATA | |
| Name: | YANDEX LLC |
| Street Address: | 16 LVA TOLSTOGO STREET |
| City: | MOSCOW |
| State/Country: | RUSSIAN FEDERATION |
| Postal Code: | 119021 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 16401688 |
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| NAME OF SUBMITTER: | MARCELA BONDAREVA |
| SIGNATURE: | /Marcela Bondareva/ |
| DATE SIGNED: | 05/02/2019 |
| Total Attachments: 3 | |
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| source=Assignment Technologies - LLC part 1#page3.tif | |

ASSIGNMENT

WHEREAS WE, **YANDEX. TECHNOLOGIES LLC**, a company registered under the laws of Russian Federation, whose complete address is 16 Lva Tolstogo str., Moscow, 119021, Russian Federation (hereinafter referred to as the **Assignor**), is the current owner of the inventions for which applications for Letters Patent have been filed in Russian Federation, which applications are listed in Appendix A.

AND, WHEREAS **YANDEX LLC**, a company registered under the laws of Russian Federation, whose complete address is 16 Lva Tolstogo str., Moscow, 119021, Russian Federation, (hereinafter referred to as the **Assignee**) desires to acquire the inventions and rights to file patent applications in all jurisdictions (hereinafter referred to as the **Territory**);

NOW THEREFORE, be it known that for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which from the Assignee is hereby acknowledged, by these presents, we, the Assignor, have sold, assigned, transferred, and set over unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to these inventions and applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim priority on these of such applications, and all applications for Letters Patent that may hereafter be filed for these inventions in the Territory and all Letters Patent that may be granted on these inventions in any jurisdiction of the Territory, and all extensions, renewals, and reissues thereof; and we hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty it is to issue patents) of the United States, and any other country of the Territory, to issue Letters Patent for these inventions to the Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY further covenant and agree that if necessary, the Assignee, its affiliates and its agents are hereby authorized to insert into the list of the countries, filing dates and serial numbers information about the countries, the filing dates and the serial numbers when known;

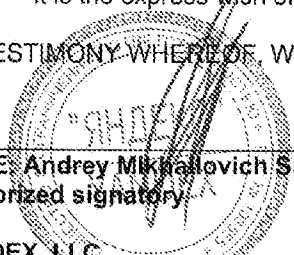
AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will communicate with the Assignee, its successors and assigns, any facts known to us respecting these inventions, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to these inventions in said Assignee, its successors or assigns, execute all divisional, continuation, reissue, and re-examination applications, make all rightful oaths and generally do everything possible to aid the Assignee, its successors and assigns, to obtain and enforce proper patent protection for these inventions in any jurisdiction of the Territory, it being understood that any expense incident to the performance of the obligations of the present paragraph shall be borne by the Assignee, its successors, and assigns.

This Assignment may be executed in counterparts, all of which shall be considered one and the same agreement.

It is the express wish of the parties that this Assignment be drafted in English.

IN TESTIMONY WHEREOF, WE HAVE SIGNED:



NAME: Andrey Mikhailovich Snigirev
Authorized signatory
YANDEX, LLC
Date of Signature: **November 1, 2018**
Place of Signature: **Moscow**



NAME: Andrey Igorevich Styskin
Authorized signatory
YANDEX TECHNOLOGIES, LLC
Date of Signature: **November 1, 2018**
Place of Signature: **Moscow**

APPENDIX A

List of RU Patent Applications

| Docket Number | Application Date | Application Number | Title |
|-----------------------|------------------|--------------------|---|
| 2018-0026-MAPS-PD1-RU | 07/03/2018 | 2018124343 | METHOD OF RECEIVING USER-COMMAND BY PROCESSOR OF ELECTRONIC DEVICE VIA TOUCHSCREEN OF ELECTRONIC DEVICE |
| 2018-0038-SE-PD1-RU | 07/03/2018 | 2018124344 | METHOD AND SERVER FOR RANKING DOCUMENTS ON A SERP |
| 2018-0006-MAPS-PD1-RU | 07/04/2018 | 2018124478 | METHOD AND ELECTRONIC DEVICE FOR GENERATING AN INDEX OF SEGMENTS OF POLYGONS |
| 2017-0037-MAPS-PD1-RU | 06/07/2018 | 2018121140 | METHODS AND SYSTEMS FOR GENERATING ROUTE INFORMATION IN MAP APPLICATION EXECUTED BY ELECTRONIC DEVICE |
| 2018-0012-ZEN-PD1-RU | 10/08/2018 | 2018135362 | METHOD AND SYSTEM FOR ESTIMATING USER-ITEM INTERACTION DATA |
| 2018-0052-ZEN-PD1-RU | 10/09/2018 | 2018135455 | METHOD AND SYSTEM FOR GENERATING DIGITAL CONTENT RECOMMENDATION |
| 2018-0064-SE-PD1-RU | 10/09/2018 | 2018135452 | METHOD AND SYSTEM FOR PROCESSING DATA |
| 2018-0065-SE-PD1-RU | 10/09/2018 | 2018135460 | METHOD AND SYSTEM FOR ROUTING AND EXECUTING TRANSACTIONS |
| 2017-0051-SE-PD1-RU | 05/18/2018 | 2018118353 | METHOD OF AND SYSTEM FOR RECOMMENDING FRESH SEARCH QUERY SUGGESTIONS ON SEARCH ENGINE |
| 2018-0003-SE-PD1-RU | 05/18/2018 | 2018118355 | METHOD AND SYSTEM OF COMPUTER-PROCESSING ONE OR MORE QUOTATIONS IN DIGITAL TEXTS TO DETERMINE AUTHOR ASSOCIATED THEREWITH |
| 2018-0002-VR-PD1-RU | 05/23/2018 | 2018118997 | METHODS OF AND ELECTRONIC DEVICES FOR DETERMINING AN |

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| | | | INTENT ASSOCIATED WITH A SPOKEN USER UTTERANCE |
| 2017-0052-SE-PD2-RU | 06/21/2018 | 2018122689 | METHOD OF AND SYSTEM FOR RANKING SEARCH RESULTS USING MACHINE LEARNING ALGORITHM |
| 2017-0062-SE-PD1-RU | 09/14/2018 | 2018132717 | METHOD AND SERVER FOR INDEXING WEB PAGE IN INDEX |
| 2018-0010-ZEN-PD1-RU | 09/14/2018 | 2018132708 | METHOD AND SYSTEM FOR GENERATING A DIGITAL CONTENT RECOMMENDATION |
| 2018-0011-ZEN-PD1-RU | 09/14/2018 | 2018132716 | METHOD AND SYSTEM FOR DETERMINING A RELEVANCY PARAMETER FOR CONTENT ITEM |
| 2018-0014-ZEN-PD1-RU | 09/14/2018 | 2018132713 | METHOD OF AND SYSTEM FOR DETERMINING USER-SPECIFIC PROPORTIONS OF CONTENT FOR RECOMMENDATION |
| 2018-0059-SE-PD1-RU | 09/14/2018 | 2018132711 | METHOD OF DETERMINING POTENTIAL MALFUNCTION OF MEMORY DEVICE |
| 2018-0060-SE-PD1-RU | 09/14/2018 | 2018132718 | PROCESSING SYSTEM AND METHOD OF DETECTING CONGESTION IN PROCESSING SYSTEM |
| 2018-0062-SE-PD1-RU | 09/14/2018 | 2018132714 | METHOD OF AND SYSTEM FOR SCHEDULING TRANSMISSION OF I/O OPERATIONS |
| 2018-0018-SE-PD1-RU | 09/17/2018 | 2018132848 | METHOD OF AND SYSTEM FOR ENRICHING SEARCH QUERIES FOR RANKING SEARCH RESULTS |
| 2018-0021-SE-PD1-RU | 09/17/2018 | 2018132851 | METHOD AND SYSTEM FOR GENERATING PUSH NOTIFICATIONS RELATED TO DIGITAL NEWS |
| 2018-0066-SE-PD1-RU | 10/15/2018 | 2018136221 | METHOD AND SYSTEM FOR PROCESSING REQUEST IN DISTRIBUTED DATABASE |