PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6049009

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------------------|----------------|
| CHRISTOPHER MICHAEL FORRESTER | 04/05/2019 |
| OMAR JOYA | 04/05/2019 |
| BRADLEY ROBERT EKIN | 04/05/2019 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16841606 |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 406103-US-CNT

NAME OF SUBMITTER: HOLLI L. TEMPLETON

SIGNATURE: /Holli L. Templeton/

DATE SIGNED: 04/06/2020

Total Attachments: 6

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PATENT 506002299 REEL: 052325 FRAME: 0774

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> PATENT REEL: 052325 FRAME: 0775

I <u>Christopher Michael FORRESTER</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled " DYNAMIC DEVICE SPEAKER TUNING FOR ECHO CONTROL" ("APPLICATION"), which:

MS Docket No.: 406103-US-NP

| will | be | filed. | ASSIGNOR | hereby | autho | rizes, | and i | reque | sts, |
|------------|-------|---------------|--------------|--------------|-------------|---------------|--------|--------|------|
| ASSI | GNE | 'S legal | representa | tive, Mici | osoft ' | Technol | ogy L | icensi | ng, |
| LLC. | , One | Micros | oft Way, Rec | lmond, W | ashingt | on 980 | 52 (AS | SIGN | E'S |
| LEG/ | AL RI | EPRESEN | TATIVES), to | insert h | iere in | parenti | neses | (filed | on |
| and | give | n Applica | ation No | | | by the fo | ollowi | ng Of | fice |
| <u>"US</u> | *** | <u>United</u> | States Pa | tent and | <u>Trac</u> | <u>lemark</u> | Offic | e"; | this |
| APPL | ICA1 | TION's A | pplication N | o., filina c | date, ar | nd Office | . whe | n kno | wn: |

was filed on <u>April 4, 2019</u> and was given Application No.

16/375.794 by the following Office "<u>US - United States Patent and</u>

Trademark Office";

Microsoft Technology Licensing, LLC, a Washington limited liability company, 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 |
|-----------------|---------------|----------------------------------|
| 16/841,606 | April 6, 2020 | United States Patent & Trademark |
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Page 1 of 2

MS Docket No.: 406103-US-NP

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).

| Printed Name in Native Language (if other than English) |
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| | l Omar IC |)) AYC | ASSIGNO | R") am the or | iainal inv | entor or an (| oriaina | ıl ioint inven | tor |
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| of su | | | | l") disclosed a | | | | | |
| entiti | ed " DYNA | MIC | DEVICE | SPEAKER T | UNING I | FOR ECHO | CONT | ROL" | |
| ("APP | LICATION") |), whic | h: | | | | | | |
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| Ш | will | be | filed. | ASSIGNO | OR hei | eby a | uthorizes, | and | reque | ests, |
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| | ASSI | GNEE | E'S legal | represer | itative, | Micros | oft Techn | ology | Licens | ing, |
| | LLC. | , One | e Micros | oft Way, R | edmon | d, Wasl | hington 98 | 052 (A | SSIGN | EE'S |
| | LEG/ | AL RI | EPRESEN | TATIVES), | to ins | ert her | e in parer | these: | s (filed | l on |
| | and | give | n Applic | ation No. | | | by the | follow | /ing O | ffice |
| | <u>"US</u> | - | <u>United</u> | States | <u>Patent</u> | and | Trademar | <u>COff</u> | <u>ice"</u> ; | this |
| | APPI | JCAT | ION's A | pplication | No., fil | ing dat | e, and Offi | ce, wh | en kno | own; |

was filed on <u>April 4, 2019</u> and was given Application No <u>16/375,794</u> by the following Office "<u>US – United States Patent and</u> Trademark Office";

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MS Docket No.: 406103-US-NP

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| (CM) Mar | 04/05/7019 |
|-------------------------|---------------------------------|
| Inversor's Signature | |
| Omar JOYA | |
| Printed Name in English | Printed Name in Native Language |
| | (if other than English) |

MS Docket No.: 406103-US-NP

MS Docket No.: 406103-US-NF

I <u>Bradley Robert EKIN</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DYNAMIC DEVICE SPEAKER TUNING FOR ECHO CONTROL" ("APPLICATION"), which:

| will be | filed. | ASSIGNOR | hereby | authorizes, | and | requests, |
|-----------|---------------|--------------|--------------|---------------|---------|--------------------|
| ASSIGNE | PS legal | representa | tive, Mici | rosoft Techr | ology | Licensing, |
| LLC., One | : Microso | oft Way, Rec | lmond, W | ashington 98 | (052 (A | ASSIGNEE'S |
| LEGAL R | EPRESEN | TATIVES), t | o insert f | iere in parei | ithese: | s (filed on |
| and give | ı Applica | ition No | | by the | follow | ing Office |
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| APPLICAT | TON's A | oplication N | o., filing o | date, and Off | ice, wh | en known: |

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Page 1 of 2

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| Inventor's Signature Bradley Robert EKIN | 4/5/19 Date |
|--|---------------------------------|
| Printed Name in English | Printed Name in Native Language |
| | (if other than English) |