#### 502199673 01/18/2013

### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

#### **CONVEYING PARTY DATA**

| Name            | Execution Date |
|-----------------|----------------|
| Pontus Carlsson | 01/02/2013     |
| Andrei Jefremov | 01/17/2013     |
| Sergey Silkin   | 12/27/2012     |
| David Zhao      | 12/21/2012     |

#### **RECEIVING PARTY DATA**

| Name:           | Microsoft Corporation |
|-----------------|-----------------------|
| Street Address: | One Microsoft Way     |
| City:           | Redmond               |
| State/Country:  | WASHINGTON            |
| Postal Code:    | 98052                 |

#### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 13659573 |

#### **CORRESPONDENCE DATA**

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Address Line 2: Patent Group Docketing Dept
Address Line 4: Redmond, WASHINGTON 98052

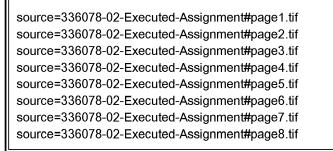
ATTORNEY DOCKET NUMBER: 336078.02

NAME OF SUBMITTER: Harendra Rana

Total Attachments: 8

PATENT REEL: 029653 FRAME: 0184 \$40.00 1365

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PATENT REEL: 029653 FRAME: 0185

# PATENT ASSIGNMENT MS Docket No.: 336078.02

| inventor of   | subject matter  | ("INVENTION") disclo  | iginal inventor or an ori<br>osed and/or claimed in<br>ignal" ("APPLICATION"), w   | a patent                               |
|---|---|---|--|--|
|   | ASSIGNEE'S legal Department, Mic Washington 980! here in parentl Application N Office | representatives, of to<br>rosoft Corporation, C<br>52 (ASSIGNEE'S LEGAL<br>heses (filed on<br>lo. | by the follow) this APPLICATIC   | fairs<br>ond,<br>sert<br>iven<br>ving  |
|   |   | · ·   | s given Application<br>ice <u>"United States Patent a</u>  | <u>ınd</u>                             |
| successors a<br>entire and e<br>(and all oth<br>applications, | ind assigns ("ASS<br>xclusive rights, ti<br>her applications                          | IGNEE"), is entitled to<br>tle and interest in th<br>and patents derive<br>United States, its te  | oration, on behalf of itsome, and is desirous of acque INVENTION and the AP act therefrom, such as erritories, and all foreign | uiring, the<br>PLICATION<br>continuing |
| REPRESENTA  |   |   | requests, ASSIGNEE's, filing date, and Office  |  |
| Application I   |   | Filing Date   | Office   |  |
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Page 1 of 2

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 in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES):

MS Docket No.: 336078.02

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).

| Parto Cal<br>Inventor's Signature<br>Pontus Carlsson | <u>Jan 2, 2013</u><br>Date      |  |
|--|---------------------------------|--|
| Printed Name in English                              | Printed Name in Native Language |  |
|  | (if other than English)         |  |

| PATENT   | A99IGNMEN1   | MS Docket No.: 3360/8.02   |
|--|--|--|
| I Andrei Jefremov ("AS: inventor of subject matter application entitled "Estimating  | ("INVENTION") disclosed  | · · · · · · · · · · · · · · · · · · ·  |
|  |  | ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )  |
| ASSIGNEE'S legal Department, Micro Washington 9805 here in parenth Application N Office  | ASSIGNOR hereby auth representatives, of the Lavosoft Corporation, One Mi 2 (ASSIGNEE'S LEGAL REPROPOSES (filed on   | v and Corporate Affairs icrosoft Way, Redmond, ESENTATIVES), to insert and given by the following this APPLICATION's |
| W was filed on Octo  | har 24. 2012 and time him  | m Ameliansian  |
|  | ber 24, 2012 and was give<br>by the following Office " <u>Ur</u><br>_";  |  |
| Microsoft Corporation, successors and assigns ("ASSI entire and exclusive rights, till (and all other applications applications, in and for the ("APPLICATION DERIVATIVES")) | GNEE"), is entitled to, and<br>le and interest in the INV<br>and patents derived the<br>United States, its territori | ENTION and the APPLICATION refrom, such as continuing  |
| ASSIGNOR hereby REPRESENTATIVES to insert to following table for any APPLICATION   | he Application No., filin  | •  |
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Page 1 of 2

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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).

17.01.2013

Inventor's Signature

Date

Andrei Jefremov

Printed Name in English

ANDRE! JEFREMOY

MS Docket No.: 336078.02

Printed Name in Native Language (if other than English)

MS Docket No.: <u>336078.02</u>

| of subject matter   |  | sed and/or clair   | or or an original joint inventor<br>med in a patent application<br>ON"), which:  |
|---|--|--|--|
| ASSIC<br>Depa<br>Wash<br>here<br>Appli<br>Office            | GNEE'S legal representa<br>rtment, Microsoft Corp<br>lington 98052 (ASSIGN<br>in parentheses (file<br>cation No. | atives, of the Law<br>poration, One Mic<br>EE'S LEGAL REPRI<br>d on<br>t | oy the following this APPLICATION's  |
| 13/6  | iled on <u>October 24, 20</u><br><u>59,573</u> by the followin<br>emark Office";                                 |  |  |
| successors and as<br>entire and exclusi<br>(and all other a | signs ("ASSIGNEE"), is<br>ve rights, title and int<br>pplications and pate<br>nd for the United Sta              | entitled to, and erest in the INVE                                       | n, on behalf of itself and its<br>is desirous of acquiring, the<br>ENTION and the APPLICATION<br>refrom, such as continuing<br>es, and all foreign countries |
| REPRESENTATIVES   | to insert the Applic   | ation No., filing  | ests, ASSIGNEE'S LEGAL<br>g date, and Office into the  |
|   | any APPLICATION DER  |  |  |
| Application No.   | riinig Ua  | te   | Office   |
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Page 1 of 2

MS Docket No.: 336078.02

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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).

|                         | 27 December 2012                |
|-------------------------|---------------------------------|
| Inventor's Signature    | Date                            |
| Sergey Silkin           | CEPTEL CUNKUH                   |
| Printed Name in English | Printed Name in Native Language |
|                         | (if other than English)         |

|   |                      |   | tor or an original joint invento |
|---|----------------------|---|----------------------------------|
|   |                      |   | aimed in a patent application    |
| entitled "Esti                          | mating Quality of a  | a Video Signal" ("APPLICA"              | TION"), which:                   |
| , <sub>.</sub>                          |                      |   |                                  |
|   |                      |   | horizes, and requests,           |
|   | ASSIGNEE'S legal     | representatives, of the La              | aw and Corporate Affairs         |
|   | Department, Micr     | osoft Corporation, One N                | Microsoft Way, Redmond,          |
|   | T-6                  |   | RESENTATIVES), to insert         |
|   | here in parenth      | eses (filed on                          | and given                        |
|   | Application No       | o,                                      | by the following                 |
|   | Office               |   | _) this APPLICATION's            |
|   | Application No., f   | iling date, and Office, wh              | en known;                        |
|   | was filed on Octo    | ber 24, 2012 and was giv                | en Application                   |
|   |                      |   | United States Patent and         |
|   | Trademark Office     |   |                                  |
|   |                      |   |                                  |
| Micro:                                  | soft Corporation,    | a Washington Corporation                | on, on behalf of itself and its  |
| successors a                            | ind assigns ("ASSIC  | SNEE"), is entitled to, an              | d is desirous of acquiring, the  |
| entire and e                            | xclusive rights, tit | le and interest in the IN               | VENTION and the APPLICATION      |
| (and all oti                            | ner applications     | and patents derived th                  | ierefrom, such as continuing     |
| applications,                           | in and for the l     | Inited States, its territo              | ries, and all foreign countries  |
| ("APPLICATIO                            | ON DERIVATIVES"));   |   |                                  |
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| Application I                           | vo.                  | Filing Date                             | Office                           |
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Inventor's Signature

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Date

David Zhao

Printed Name in English

Printed Name in Native Language

(if other than English)