| USTOMER NO.: 24729 SRM PTQ-1595 | 05-11-20 | U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office | |
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| v. 01/07/2007 | | | |
| | 1035599 | 27 ord the attached original documents or copy thereof. 2. Name and address of receiving party(ies): | |
| Name of conveying party(Ics):)livier LeMeur | d States Patent and Trademark Office: Please rec | Name: THOMSON LICENSING 46 Qual A. Le Gallo : | |
| lexandre Ninassi Patrick Le Callet Dominque Barba | | F-92100 Boulogne-Billancourt, France | |
| dditional name(s) of nvcying party(ies) tached: | X No | | |
| Nature of convenance: Assignment Security Agreement | Merger Change of Name | X N | ło |
| Other Execution Date: March 10, March 2, | February 26 and April 27,2009 respectively | Additional name(s) & address(es)attached? | |
| Application number(s) or patent nu If this document is being filed togs A. Patent Application No.(s): | imber(s): ther with a new application, the execution date of $12/384$, 900 | bf the application is: : March 10, March 2, February 26 and April 27, 3000 responses to the second s | cctively |
| | l numbers attached? Yes | | |
| Name and address of party to who concerning document should be m Name: ROBERT D. SHI Internal Address: PATENT OPER. THOMSON LIC SUITE 200 Street or PO Address: P. O. Box | aailed: EDD ATIONS BNSING (LC | 6. Total number of applications and patents involved: 1 7. Total Fee (37 CFR 3.41): \$40.00 Enclosed XAuthorized to be charged to deposit account 8. Deposit account number: 07-0832 | |
| City: PRINCETON State: NE | W JERSEY Zip: 08543-5312 DO | NOT USE THIS SPACE | |
| Statement and signature. To the best of my knowledge and b copy of the original document. <u>Robert B. Levy</u> Name of Person Signing | belief, the foregoing information is truf and corr | Reg. No. | |
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| | DO NO | T DETACH THIS PORTION | |
| Mail documents to be recorded | with this sheet to: | | |
| | Director of the Un | Assignment Recordation Services Ited States Patent and Trademark Office P. O. Box 1450 Indria, Virginia 22313-1450 | |
| Public burden reporting for this and gathering the data needed, a Office, Office of Information Sy (0651-0011), Washington, D.C. | stems, PK2-1000C, Washington, D.C. 20231, and | t 30 minutes per document to be recorded, including time for reviewing the docum sheet. Send comments regarding this burden estimate to the U.S. Patent and Trad nd to the Office of Management and Budget, Paperwork Reduction Project | ment lemark |
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ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Olivier Le Meur, La Souche, 35160 Talensac, France; Alexandre Ninassi, 1 rue Antoine de Saint-Exupiry, 35470 Bain de Bretagne, France; Patrick Le Callet, 4 rue de St Etienne, 44330 Le Pallet, France; Dominique Barba, 4 rue des Ecureuils, 44470 Carquefou, France; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

Method for assessing the quality of a distorted version of a frame sequence

for which said assignor has caused an application for United States Letters Patent to be prepared, the specification of which was filed on as Application Serial No.

, or, if not identified here by filing date and serial number, the inventor's declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office.

AND WHEREAS

Thomson Licensing 46 Quai A. le Gallo F-92100 Boulogne-Billancourt France

hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignce's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor authorizes and requests the Commissioner of Patents and

AND said assignor authorizes and requests the commissioner of rate and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. MAY 27 2009 09:25 FR THOMSON LICENSING 609 734 6888 TO USPTO-ASSIGN BRA P.05/16

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| EXECUTED, this <u>x ho</u> day of <u>x</u> WITNESSES: Signature: <u>x</u> Name: Fabrice URBAN Address: (f mil ok Bowgachement) 35570 CESSON service Signature: <u>x</u> <u>Manual</u> | <u>Yand</u> , 2009. ASSIGNOR: Signature: <u>*</u> Name: Olivier Ve Meur | |
| Name: XCHAMARET Chustel Address: X g Avenue J Slittenan 35135 Chantepie | d , 2009. | |
| EXECUTED, this <u>术</u> day of <u>⊀</u> | | |
| WITNESSES: | ASSIGNOR: | |
| Signature: <u>X</u> | Signature: <u> </u> | <u> </u> |
| Name: Address: A | Name: Alexandre Ninas | si |
| Signature <u>: X</u> Name: X Address: X | | |
| EXECUTED, this <u>X</u> day of <u>X</u> | , 2009. | |
| WITNESSES: | ASSIGNOR: | |
| Signature: <u>X</u> | Signature: <u> </u> | <u>_</u> |
| Name: X Address: X | Name: Patrick Le Calle | ≥t |
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Name: Dominique Barba

ASSIGNOR:

Signature: <u>X</u>

Signature<u>: X</u>

Name: X Address:

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ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Olivier Le Meur, La Souche, 35160 Talensac, France; Alexandre Ninassi, 1 rue Antoine de Saint-Exuplry, 35470 Bain de Bretagne, France; Patrick Le Callet, 4 rue de St Etienne, 44330 Le Pallet, France; Dominique Barba, 4 rue des Ecureuils, 44470 Carquefou, France; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

Method for assessing the quality of a distorted version of a frame sequence

for which said assignor has caused an application for United States Letters Patent to be prepared, the specification of which was filed on as Application Serial No.

, or, if not identified here by filing date and serial number, the inventor's declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office.

AND WHEREAS

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Thomson Licensing 48 Quai A. le Gallo F-92100 Boulogne-Billancourt France

hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

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AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

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| WITNESSES: | ASSIGNOR: |
| Signature: <u>X</u> , | Signature: <u>X</u> |
| Name: X Address: X | Name: Olivier Le Meur |
| Signature <u>: X</u> | |
| Name: X Address: X | |
| EXECUTED, this <u># 2nd</u> day of <u>x</u> | <u>TARCH</u> , 2009. |
| WITNESSES: | ASSIGNOR: |
| Signature: x Stata to PC | Signature: X |
| Name: RICHARDON DEMIE Address: A 13 RULE GEORGE STUD 35410 OSSE-FRANCE | Name: Alexandre Ninassi |
| Signature: | |
| Name: X HANON lydie Address: A MAnue be Porche - 35 | 5410 Chataanjinon . France. |
| EXECUTED, this <u>X</u> day of X | , 2009. |
| WITNESSES: | ASSIGNOR: |
| Signature: X | Signature: <u>X</u> |
| Name: Address: X | Name: Patrick Le Callet |
| Signature <u>: X</u> | |
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| EXECUTED, this <u>X</u> day of <u>X</u> | , 2009. |
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Name: X Address: X

> PATENT REEL: 022738 FRAME: 0044

PATENT REEL: 022738 FRAME: 0045

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Olivier Le Meur, La Souche, 35160 Talensac, France; Alexandre Ninassi, 1 rue Antoine de Saint-Exupéry, 35470 Bain de Bretagne, France; Patrick Le Callet, 4 rue de St Etienne, 44330 Le Pallet, France; Dominique Barba, 4 rue des Ecureulis, 44470 Carquefou, France; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

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AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

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| WITNESSES: | ASSIGNOR | | v |
| Signature: <u>X</u> | Signature:_ | | <i>,</i> |
| Name; Χ Address: Χ | Name: Oliv | ier Le Meur | · · · |
| Signature <u>: X</u> Name: X Address: X | <u> </u> | | · · · |
| | D, this <u>X</u> day of <u>X</u> , 20 | 09. | · . |
| | D, this <u>⊀ </u> | | |
| WITNESSES: Signature: <u>X</u> | , , , , , , , , , , , , , , , , , | | |
| Name: Address: X | Name: Ak | exandre Ninassi | . , |
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| EXECUT | ED, this x 16 day of x February, 2 | 009. | , |
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| Signature: | Signature Name: P | atrick Le Callet | 2 |
| Address: /\ | nee der Fetter | | 5 1 1 1 |
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| Signature <u>: X</u> | | | |
| Name: X Address: X | 1. RICORDEL | | |
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| WITNESSES: | ASSIGNOR: |
| Signature: | Signature: |
| Name: / C. VIARD-GAUGIN Address: 1 35 rue du Fezzon | Name: Dominique Barba |
| 44300 - NANIES | |
| Signature: * | |
| Name: X Address: V. TRLCORDEL | |
| 82 me Français | |
| 44390 Nat-bur | - Erche |
| France | |

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PATENT REEL: 022738 FRAME: 0047

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Olivler Le Meur, La Souche, 35160 Talensac, France; Alexandre Ninassi, 1 rue Antoine de Saint-Exupiry, 35470 Bain de Bretagne, France; Patrick Le Callet, 4 rue de St Etienne, 44330 Le Pallet, France; Dominique Barba, 4 rue des Ecureuils, 44470 Carquefou, France; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

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AND WHEREAS

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Thomson Licensing 46 Qual A. le Gallo F-92100 Boulogne-Billancourt 11 Fizince

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| | U(i,j) | ASSIGNOR: | |
| Signature: | | Signature: | <u> </u> |
| Name: Address: | | Name: Olivler Le Meur | |
| Signature <u>:</u> Name: Address: | ichi, killer ada yantik di anayani tixen a shur u | ν Γι΄ Γι΄ Φ΄ Ι | |
| EXECUTED, this | , | , 2009. | |
| WITNESSES: | • | ASSIGNOR | |
| Signature: | , | Signature: | <u>.</u> |
| Name: Address: | | Name: Alexandre Ninassi | |
| Signature <u>:</u> | | | |
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| WITNESSES: | i il poper de 1951 - 1951 E | ASSIGNOR: | |
| Signature: | | Signature: | <u> </u> |
| Name: Address: | | Name: Patrick Le Callet | |
| Signature <u>:</u> | · · · · |) . | |
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| | | | PATENT |

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______day of <u>April</u> 2009. EXECUTED, this 27ASSIGNOR: WITNESSES: Signature: Signature: Name: Dominique Barba C. VIARO- GALDIN Name: Address: 35 rue ch Foszan 44500 - Nocusta VINCENT TOLCORDEL Signature: 82 rue François Dopas ind Name: Address: 44 390 NORF-SUR- FRDRE

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