

VIA EXPRESS MAIL EV 438075070 US
CUSTOMER NO. 24498

FORM PTO-1595
Rev. 04/2003

1/31/05
06-21-2005



103024766

PU020354

06-21-2005
c'd PCT/PTO 31 JAN 2005

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
MAXIM BORISOVICH BELOTSEKOVSKY
VINCENT DEMOULIN
LOUIS ROBERT LITWIN JR.
Additional name(s) of conveying party(ies) attached: ☒ Yes ☐ No

3. Nature of conveyance:
☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date July 29, 2002; July 31, 2002; October 30, 2002; respectively

4. Application number(s) or patent number(s):
If this document is being filed together with a new application, the execution date of the application is:
A. Patent Application No.(s): **PCT/US03/24188**

Additional numbers attached?

Yes ☐ No ☒ X

2. Name and address of receiving party(ies):
Name: **Thomson Licensing S.A.**

Internal Address:

Street Address: **46 Quai A. Le Gallo**
F-92100 Boulogne-Billancourt, France

Additional name(s) & address(es) attached?

☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:
Name: **JOSEPH S. TRIPOLI**
Internal Address: **PATENT OPERATIONS**
THOMSON LICENSING INC.

Street Address: **P. O. Box 5312**

City: **PRINCETON** State: **NEW JERSEY** Zip: **08543-5312**

6. Total number of applications and patents involved: 1

7. Total Fee (37 CFR 3.41): **\$40.00**

☐ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number:
07-0832

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

JEFFREY M. NAVON

Name of Person Signing

Signature - Registration No. 32,711

1/31/05
Date

Total number of pages including cover sheet, attachments, and document **3**

DO NOT DETACH THIS PORTION

Mail documents to be recorded with this sheet to:

Mail Stop Assignment Recordation Services
Director of the United States Patent and Trademark Office
P. O. Box 1450
Alexandria, Virginia 22313-1450

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

PATENT
REEL: 016694 FRAME: 0675

ASSIGNMENT AND AGREEMENT

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of 3 joint inventors
(if plural inventors are named below) of the inventions relating to CENTRALIZED BUFFER ARCHITECTURE FOR AN
ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) RECEIVER

and described in Docket No. PU 020354 and the thereupon-based International (Patent Cooperation Treaty) Application for patent about to be filed or lately filed by said corporation naming me/us as inventor(s).

For valuable consideration received, I hereby sell, assign and transfer to **THOMSON LICENSING S.A.**, a corporation duly organized and existing under the laws of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions and application, and all the rights and privileges under any and all Patents that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or file document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with **THOMSON LICENSING S.A.**, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at	<u>Indianapolis, Indiana USA</u>	Date	<u>07/29/02</u>
Inventor (1)	<u>Maxim Borisovich Belotserkovsky</u> (Type or Print)	<u>maxim Borisovich Belotserkovsky</u> (Signature in Full. No initials.)	
Post Office Address	<u>9108 Bryant Lane 3A, Indianapolis, Indiana 46250 USA</u>		
1st Witness	<u>Charles Antoinette Downs</u> (Type or Print)	<u>Charles Antoinette Downs</u> (Signature in Full. No initials.)	
2nd Witness	<u>Roland Lloyd Uhrick</u> (Type or Print)	<u>Roland Lloyd Uhrick</u> (Signature in Full. No initials.)	
Signed at	_____	Date	_____
Inventor (2)	<u>Vincent Demoulin</u> (Type or Print)	_____ (Signature in Full. No initials.)	
Post Office Address	<u>2, rue de Clayes, 35137 Pleumeleuc, FRANCE</u>		
1st Witness	_____	_____ (Signature in Full. No initials.)	
2nd Witness	_____	_____ (Signature in Full. No initials.)	
Signed at	<u>Princeton, New Jersey USA</u>	Date	<u>10-30-02</u>
Inventor (3)	<u>Louis Robert Litwin, Jr.</u> (Type or Print)	<u>Louis Robert Litwin Jr</u> (Signature in Full. No initials.)	
Post Office Address	<u>34-14 Quail Ridge Drive, Plainsboro, New Jersey 08536 USA</u>		
1st Witness	<u>Anelia F. Urban</u> (Type or Print)	<u>Anelia F. Urban</u> (Signature in Full. No initials.)	
2nd Witness	<u>MARGARET B. PASLowski</u> (Type or Print)	<u>Margaret B. Paslowski</u> (Signature in Full. No initials.)	

After this Assignment has been recorded please RETURN to:

Patent Operations
THOMSON multimedia Licensing Inc.
P. O. Box 5312
Princeton, NJ 08543-5312

ASSIGNMENT AND AGREEMENT

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of 3 joint inventors
(if plural inventors are named below) of the inventions relating to **CENTRALIZED BUFFER ARCHITECTURE FOR AN
ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) RECEIVER**

and described in Docket No. PU 020354 and the thereupon-based International (Patent Cooperation Treaty) Application for patent about to be filed or lately filed by said corporation naming me/us as inventor(s).

For valuable consideration received, I hereby sell, assign and transfer to **THOMSON LICENSING S.A.**, a corporation duly organized and existing under the laws of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions and application, and all the rights and privileges under any and all Patents that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with **THOMSON LICENSING S.A.**, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at	<u>Indianapolis, Indiana USA</u>	Date	
Inventor (1)	<u>Maxim Borisovich Belotserkovsky</u> (Type or Print)		(Signature in Full. No initials.)
Post Office Address	<u>9108 Bryant Lane 3A, Indianapolis, Indiana 46250 USA</u>		
1st Witness	<u></u> (Type or Print)		(Signature in Full. No initials.)
2nd Witness	<u></u> (Type or Print)		(Signature in Full. No initials.)
Signed at	<u>Rennes, France</u>	Date	<u>07/31/2009</u>
Inventor (2)	<u>Vincent Démoulin</u> (Type or Print)		(Signature in Full. No initials.)
Post Office Address	<u>2, rue de Clayes, 35137 Pleumeleuc, FRANCE</u>		
1st Witness	<u>Charline GUGUEN</u> (Type or Print)		(Signature in Full. No initials.)
2nd Witness	<u>Christopher Howson</u> (Type or Print)		(Signature in Full. No initials.)
Signed at	<u>Princeton, New Jersey USA</u>	Date	
Inventor (3)	<u>Louis Robert Litwin, Jr.</u> (Type or Print)		(Signature in Full. No initials.)
Post Office Address	<u>34-14 Quail Ridge Drive, Plainsboro, New Jersey 08536 USA</u>		
1st Witness	<u></u> (Type or Print)		(Signature in Full. No initials.)
2nd Witness	<u></u> (Type or Print)		(Signature in Full. No initials.)

After this Assignment has been recorded please RETURN to:

Patent Operations
THOMSON multimedia Licensing Inc.
P. O. Box 5312
Princeton, NJ 08543-5312