		10/	009298
EXPRESS MAIL EK816049604US	A/0581-20		0 4 DEC 2001
FORM PTO-159: 03-21-2002	RCA 89549	U.S. DEPARTMENT OF COMM Patent and Trademark	
	RECORDATION FORM COVER S PATENTS ONLY		
To the Honorable 102026612	attached original documents or copy	thereof.	
1. Name of conveying party(ics). SCOTT EDWARD KLOPFENSTEIN	2. Name and addre	ss of receiving party(ies):	
AARON HAL DINWIDDIE	Name: THOMSON Internal Address: 40		
DANIEL RICHARD SCHNEIDEWEND Additional name(s) of Yes No X	F-92100 Bould	ogne-Billancourt France	
	Street Address:		
attached: $12 - 4 - 0$			
3. Nature of conveyance:	City:	State:	Zip:
Assignment X Merger Security Agreement Change of Name Other			
Execution Date: 31 July, 8 and 3 August 2001, respectively		& address(es) attached?	Yes No X
 Application number(s) or patent number(s): If this document is being filed together with a new application, the ex A. Patent Application No.(s) US 60/139,467 US 60/143,341 PCT/US00/15760 	B. Patent No.(s)		
Additional numbers attached?	Yes No X		
 Name and address of party to whom correspondence concerning document should be mailed: Name: JOSEPH S. TRIPOLI Internal Address: PATENT OPERATIONS- 	 Total number of Total Fee (37 CF 	applications and patents involved:	_1
THOMSON MULTIMEDIA LICENSING INC.	Enclosed		
Street Address: PO Box 5312 City: PRINCETON State: NEW JERSEY Zip :08543-5312	8. Deposit account 07-0832	number:	
City: PRINCETON State: NEW JERSEY Zip :08543-5312	DO NOT USE THIS SPAC	'E	······································
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is tr copy of the original document.	we and correct and any attached copy	is a true	
KUNIYUKI AKIYAMA	form	Dec. 4. 2	<u>- 00</u> /
Name of Person Signing		Date	
Total number of pages including cover sheet, attachments OMB No. 0651-0011 (exp. 4/94)	and document: 4		
ОМВ № 0031-0011 (ехр. 4/94)	DO NOT DETACH THIS POR	TION	
Mail documents to be recorded with required cover sheet information	ı to:		
12/17/2001 UEDUVIJE 00000205 070832 10009298	Assistant Commissioner for Pa Box Assignments	tents	
Ø2 FC:581 40.00 CH	Washington, D.C. 20231		
Public burden reporting for this sample cover sheet is estimated to ave including time for reviewing the document and gathering the data need sheet. Send comments regarding this burden estimate to the U.S. Pater Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of N (9651-0011), Washington, D.C. 20503.	ded, and completing and reviewing th nt and Trademark Office, Office of In	e sample cover formation	

PATENT REEL: 012689 FRAME: 0114

!

ASSIGNMENT AND AGREEMENT

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of three (3) joint inventors (if plural inventors are named below) of the inventions relating to <u>REAL-TIME SIGNAL STRENGTH MEASUREMENT AND DISPLAY OF DIGITAL TELEVISION SIGNALS</u> described in RCA Docket No. 89549 and 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 applications, 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	3 Indianapolis, IN	Date	4 7/31/00
Inventor (1)	Scott Edward Klopfenstein (Type or Print)		4 7/31/00 5 Bart Edward Kladen (Signature in Full, No initials.)
Po	ost Office Address, 74/9 Wood Court, Fishe	rs. Ind	
1st Witness	2 (harise Antur meter 10	uin8	
2 nd Witness 2	(Type or Print)		Signature in Full. No initials.)
Signed at		Date	
Inventor (2)	Aaron Hal Dinwiddie		
	(Type or Print)		(Signature in Full. No initials.)
Po	st Office Address 12466 Trophy Drive, Fish	ners, li	ndiana 46038-3029, USA
1st Witness			/
1- Withess	(Type or Print)		(Signature in Full. No initials.)
2nd Witness		1	
	(Type or Print)	<u> </u>	(Signature in Full. No initials.)
Signed at	/	Date	
Inventor (3)	Daniel Richard Schneidewend		
	(Type or Print)		(Signature in Full. No initials.)
Po	st Office Address 11221 Tall Trees Drive, F	ishers	s, Indiana 46038-4650, USA
1st Witness			
	(Type or Print)		(Signature in Full. No initials.)
2ndWitness	(Tune or Drint)		
L	(Type or Print)		(Signature in Full. No initials.)
	/		

PATENT REEL: 012689 FRAME: 0115

ASSIGNMENT AND AGREEMENT

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of three (3) joint inventors (if plural inventors are named below) of the inventions relating to <u>REAL-TIME SIGNAL STRENGTH MEASUREMENT AND DISPLAY OF DIGITALTELEVISION SIGNALS</u> described in RCA Docket No. 89549 and 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 applications, 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

declarations and do all acts which may be necessary, desirable of convenient for securing and maintaining patents of 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		Date		
Inventor (1)	Scott Edward Klopfenstein			
ļ	(Type or Print)		(Signature in Full. No initials.)	
	Post Office Address 7419 Wood Court, Fish	ners, Ind	liana 46038-1752, USA	
1 st Witness		_		
1	(Type or Print)	_	(Signature in Full. No initials.)	
2ndWitness	<i></i>	_		
J	(Type or Print)		(Signature in Full. No initials.)	
Signed at	3 Indiansolis IN	Date	4 8/8/00	
Inventor (2)	Aaron Hal Dinwiddie	-	5 ann Halfimindlin	
	(Type or Print)		(Signature in Full. No initials.)	
Post Office Address 12466 Trophy Drive, Fishers, Indiana 46038-3029, USA				
1 st Witness	6 Elizabeth Ann Tacuson	_	· Clyabeth an Jackson	
2 nd Witness	«Charise Art burgette Da	wig	(Signature in Full. No initials.)	
Signed at		Date		
Inventor (3)	Daniel Richard Schneidewend			
}	(Type or Print)	-	(Signature in Full. No initials.)	
	Post Office Address 11221 Tall Trees Drive	, Fisher	s, Indiana 46038-4650, USA	
1st Witness				
	(Type or Print)	_	(Signature in Full. No initials.)	
2 nd Witness	·	-		
L	(Type or Print)		(Signature in Full. No initials.)	

-

PATENT REEL: 012689 FRAME: 0116

ASSIGNMENT AND AGREEMENT

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of three (3) joint inventors (if plural inventors are named below) of the inventions relating to <u>REAL-TIME SIGNAL STRENGTH MEASUREMENT AND DISPLAY OF DIGITALTELEVISION SIGNALS</u> described in RCA Docket No. 89549 and 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 applications, 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.

1 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.

1 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	Date
Inventor (1)	Scott Edward Klopfenstein
	(Type or Print) (Signature in Full. No initials.)
Pos	t Office Address 7419 Wood Court, Fishers, Indiana 46038-1752, USA
1 st Witness	
	(Type or Print) (Signature in Full. No initials.)
2ndWitness -	(Type or Print) (Signature in Full. No initials.)
Signed at	Date
	Dare
Inventor (2)	Aaron Hal Dinwiddie
	(Type or Print) (Signature in Full. No initials.)
Pos	t Office Address 12466 Trophy Drive, Fishers, Indiana 46038-3029, USA
1st Witness	
	(Type or Print) (Signature in Full. No initials.)
2ndWitness	(Type or Print) (Signature in Full. No initials.)
Signed at _3	Malanapais, Malara Date 1 8/3/00
Inventor (3)	Daniel Richard Schneidewend 5 Pour Purchal Shall
	(Type or Print) (Signature in Full. No initials.)
Pos	Office Address ` 11221 Tall Trees Drive, Fishers, Indiana 46038-4650, USA
1st Witness	(Type or Print)
2ndWitness	