05-17-2002



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Name of conveying party(ies):	1 Comments or copy thereof.	24
1) MICHAEL DAVID ZOLTWOSKI 2) GREGORY JOHN TOMEZAK	2. Name and address of receiving party(ies):	
3) JAMES VINCENT KROGMEIER 4)CHANDRA MOHAN 5) ZHIMING	Name: THOMSON Licensing S.A.	22
	S ZHANG Internal Address:	Ü
Additional name(s) of X No.	Street Address: 46 Quai A. Le Gallo	
conveying party(ies)	92648 Boulogne, Cedex, France	
attached: 3. Nature of conveyance:	- Barry - Table	
X Assignment Merger		
Security Agreement Change of Name		
Other		
Execution Date: APRIL 30, 2002 and MAY 3, 2002 Respectively	Additional name(s) & address(es) attached?	V.V.
4. Application number(s) or patent number(s):		X No
If this document is being filed together with a new application, the execution date	of the application is:	
A. Patent Application No.(s):	D D-44 N - (5)	
	B. Patent No.(s)	
Additional numbers attached?		
Additional numbers attached?	X No	
5. Name and address of party to whom correspondence	6. Total number of applications and patents involved: 1	
concerning document should be mailed:	and patents involved 1	
Name: JOSEPH S. TRIPOLI		
Internal Address: THOMSON multimedia Licensing Inc.	7. Total Fee (37 CFR 3.41): \$40.00	
PATENT OPERATIONS	Enclosed	
Street Address: P. O. BOX 5312	X Authorized to be charged to deposit account	
outer radices. 1. O. DOA 3312	8. Deposit account number: 07-0832	
City: PRINCETON State: NEW JERSEY Zip: 08543-5312	(Attach duplicate copy of this page if paying by deposit acct)	
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Robert B. Levy	8 117 0	
Name of Person Signing Signature Total number of pages including	Reg.No.: 28,234 Cover sheet, attachments, and document 3	
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PATENT

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ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

PTU 020003

(if plural inventors are named below) of the inventions relating to

DSP-BASED VARIABLE APERTURE CODE GENERATION TECHNIQUE

described in an application for Letters Patent of the United States of America filed on HEREWITH or, if not identified here by filing date and serial number, executed by me on even date with my execution of this

Assignment/Agreement.

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 all the rights and privileges under any and all Letters Patent 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.

l 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

Lurdue University Signed at Date Inventor (1) Michael David Zaltowski (Type or Print) (Signature in Full, No initials.) 154 Gibson Ct., West Lafayette, Indiana 47906 Post Office Address WASEEM (Type or Print) AHMAD SHEIKH 1st Witness ANUEL 2ndWitness Signed at Date Inventor (2) Gregory John Tomezak (Type or Print) Post Office Address 3546 Lakeshore Dr., Waterford, Michigan 48329 1st Witness WASEEM (Type or Print) MANUEL 2ndWitness (Type or Print) (Signature in Full. No initial Signed at Purdue University 4/30/02 Inventor (3) James Vincent Krogmeier (Type or Print) Post Office Address 122 Circle Lane, Indiana 47906 WASEEM AHMAD SHEIKH 1st Witness APRAEZ MANUEL 2ndWitness (Type or Print) (Signature in Full. No initials.)

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

PATENT REEL: 012892 FRAME: 0045

PTU 020003

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

(if plural inven	stors are named below) of the inventions relating to		
	-	DSP-BASE	D VARIABLE APERTURE CODE GENERATION TECHNIQUE
	n application for Letters Patent of the United States of Amer or, if not identified here by filing date and ser	ica filed on	HEREWITH executed by me on even date with my execution of this
Letters Patent agree do all acts white and for vesting agree corporation and representatives authority authority the area of the required in a other proper primer cover cover	greement. aluable consideration received, I hereby sell, assign and tra successors, and assigns my entire right, title and interest, that may be granted therefor, and any divisions, continuation the that, when requested, I will, without charge to said corpora the that, when requested, I will, without charge to said corpora the that will communicate to said corporation or its represent dat its expense will testify in any legal proceedings, and ger s or nominees, to obtain or enforce proper protection for said orize and empower said corporation, its successors, assign name, or in my/our name, in any and all countries and to im the benefit of the right of priority provided by the Internationa to be substituted for it, and to invoke and claim such right of p by consent that a copy of this assignment shall be deemed a any country for any purpose and more particularly in proof or olection for said inventions, and to claim the aforesaid benefit mended, or by any convention which may beneforth be subs	nsfer to THC , for all cour ns, reissues ation but at it and maintain nominees. latives any fa- erally do evi d inventions is or nomine voke and cla il Conventior oriority withou full legal an full legal to fits of the right of fits of the right of inns, legal fa	omson Licensing s.A., a corporation duly organized and existing under the law and to said inventions, and all the rights and privileges under any and a and extensions thereof. Its expense, sign all papers, take all rightful oaths, make all rightful declarations an initial papers, take all rightful oaths, make all rightful declarations an initial papers or other forms of protection for said inventions in any and all countries acts known to me respecting said inventions and when requested by said terything possible to ald said corporation, its successors, assigns and legal in any and all countries. The protection for patent or other form of protection for said inventions file in for the Protection of Industrial Property, as amended, or by any convention which the protection of industrial Property, as amended, or by any convention which the fitted corporation or its successors, assigns or nominees to apply for patent of the said corporation or its successors, assigns or nominees to apply for patent of the priority provided by the International Convention for the Protection of Industrial Property.
Signed at	Indianapolis	Date	B5/06/02
Inventor (4)	Chandra Mohan (Type or Print)	_	(Signature in Full. No initials.)
{	Post Office Address 12970 Fleetwood Dr.,	Carmel,	Indiana 46032
1st Witness	WASEEM AHMAD SHEIK (Type or Print)	Ħ	(Signature in Full. No initials.)
2ndWitness	MANUEL APRAEZ (Type or Print)	_	(Signature in Full. No initials.)
Signed at	Purdue University	Date 	5/03/02
Inventor (5)	Zhiming Zhang (Type or Print)	-	(Şignature in Full. No initials.)
	Post Office Address 10854 Belair Dr., India	napolis,	Indiana 46280
1st Witness	WASEEM AHMAD SHEIKH (Type or Print)	<u>.</u>	(Signature in Full. No initials.)
2ndWitness	MANUEL APRAEZ (Type or Print)		(Signature in Full. No initials.)
Signed at		Date –	
Inventor (6)	(Type or Print)	_	(Signature in Full. No initials.)
F	Post Office Address		
1st Witness			
	(Type or Print)	-	(Signature in Full. No initials.)

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2ndWitness

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(Signature in Full. No initials.)

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