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Docket No.: PU070090

CUSTOMER NO.: 24498

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> PATENT REEL: 023487 FRAME: 0932

Customer No. 24498

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

Docket No. PU070090 12/451273

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of _______ joint inventors (if plural inventors are named below) of the inventions relating to METHOD AND APPARATUS FOR IMPROVING THROUGHPUT AND ERROR PEFORMANCE OF RATELESS CODING SYSTEMS described in an Application for Patent filed on MAY 3, 2007 under Serial No. PCT/US07/10771 and described in the file associated with Docket No. PU070090 , listed above or, if not identified here by filing date and serial number or by the Docket Number listed above, 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, a corporation duly organized and existing under the laws of the country 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. 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, 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. Princeton University Signed at Inventor (1) CHIA-HAN LEE (Type or Print) Post Office Address 8 Lawrence Drive, Apartment # 305, Princeton, NJ 08540, USA 1st Witness (Type or Print) (Signature in Full. No initials.) 2ndWitness (Signature in Full. No initials.) (Type or Print) Signed at **WEN GAO** Inventor (2) (Signature in Full. No initials.) (Type or Print) Post Office Address 73 Warwick Road, West Windsor, NJ 08550, USA 1st Witness (Signature in Full. No initials.) (Type or Print) 2ndWitness (Signature in Full. No initials.) (Type or Print) Signed at Date Inventor (3) (Type or Print) (Signature in Full. No initials.) Post Office Address 1st Witness (Type or Print) (Signature in Full. No initials.)

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

Docket No. PU070090 2/451273

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of ______ joint inventors (if plural inventors are named below) of the inventions relating to METHOD AND APPARATUS FOR IMPROVING THROUGHPUT AND ERROR PEFORMANCE OF RATELESS CODING SYSTEMS described in an Application for Patent filed on MAY 3, 2007 under Serial No. PCT/US07/10771 Docket No _ , listed above or, if not identified here by filing date and serial number or by the Docket Number listed above, executed by me on even PU070090 date with my execution of this Assignment/Agreement. For valuable consideration received, I hereby sell, assign and transfer to Thomson Licensing, a corporation duly organized and existing under the laws of the country 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. 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, 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) CHIA-HAN LEE (Signature in Full. No initials.) (Type or Print) Post Office Address 8 Lawrence Drive, Apartment # 305, Princeton, NJ 08540, USA 1st Witness (Type or Print) (Signature in Full. No initials.) 2ndWitness (Type or Print) (Signature in Full. No initials Princeton, N Signed at inventor (2) WEN GAO (Type or Print) Post Office Address 73 Warwick Road, West Windsor, NJ 08550, 1st Witness Type or Print) terani 2ndWitness (Type or Print) Signed at Date Inventor (3) (Type or Print) (Signature in Full. No initials.) Post Office Address 1st Witness (Type or Print) (Signature in Full. No initials.) 2ndWitness

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