

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY	03/05/2010
RECEIVING PARTY DATA	
Name:	HONG KONG TECHNOLOGIES GROUP LIMITED
Street Address:	OFFSHORE CHAMBERS, P.O. BOX 217
City:	Apia
State/Country:	SAMOA
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13222175
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ATTORNEY DOCKET NUMBER:	VAMSP103USA
NAME OF SUBMITTER:	Thomas E. Watson
Total Attachments: 13 source=Assignment2-HKST-to-HKTGL#page1.tif source=Assignment2-HKST-to-HKTGL#page2.tif source=Assignment2-HKST-to-HKTGL#page3.tif source=Assignment2-HKST-to-HKTGL#page4.tif source=Assignment2-HKST-to-HKTGL#page5.tif	

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ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, The Hong Kong University of Science and Technology, a Hong Kong educational and research institution, with an address at Clear Water Bay, Kowloon, Hong Kong, having the right to hold and to transfer the ownership rights of intellectual property created by its employees and students, ("**Assignor**"), does hereby sell, assign, transfer, and convey unto Hong Kong Technologies Group Limited, a Samoa limited liability company, with an address at Offshore Chambers, P.O. Box 217, Apia, Samoa ("**Assignee**"), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the "**Patent Rights**"):

- (a) the provisional patent applications, patent applications and patents listed in the table below (the "**Patents**");
- (b) all patents and patent applications (i) to which any of the Patents claims priority directly or indirectly through a series of direct priority claims and/or (ii) for which any of the Patents forms a basis for priority directly or indirectly through a series of direct priority claims;
- (c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisionals and registrations of any item in any of the foregoing categories (a) and (b);
- (d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;
- (e) all items in any of the foregoing in categories (b) through (d), whether or not expressly listed as Patents below and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;
- (f) all inventions, invention disclosures, and discoveries described in any item in any of the Patents and all other rights arising out of such inventions, invention disclosures, and discoveries;
- (g) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;



(h) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (b) through (g), including, without limitation, all causes of action and other enforcement rights for

- (1) damages,
- (2) injunctive relief, and
- (3) any other remedies of any kind for past, current, and future infringement; and
- (4) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (h).

Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
11/755,179	US	05/30/2007	Adaptive Multi-User MIMO Non-Cooperative Threshold Based Wireless Communication System Using Limited Channel Feedback	Wang, Elva Cheng
PCT/IB2008/002785	WO	03/07/2008	Robust Rate, Power and Precoder Adaptation for Slow Fading MIMO Channels with Noisy Limited Feedback	WU, Tianyu
08826573.1	EP	10/2/2009	Robust Rate, Power and Precoder Adaptation for Slow Fading MIMO Channels with Noisy Limited Feedback	WU, Tianyu
12/042,073	US	03/04/2008	Robust Rate, Power and Precoder Adaptation for Slow Fading MIMO Channels with Noisy Limited Feedback	WU, Tianyu
12/039,869	US	02/29/2008	Combined Rate and Precoder Design for Slow Fading Correlated MIMO Channels with Limited Feedback	LAU, Vincent Kin Nang
PCT/IB2009/005373	WO	02/20/2009	Multi-user MIMO Systems with Imperfect CSIT and ARQ	WANG, Rui
12/038,253	US	02/27/2008	Multi-user MIMO Systems with Imperfect CSIT and ARQ	WANG, Rui
PCT/IB2009/005015	WO	01/07/2009	Linear Precoding for MIMO Channels with Outdated Channel State Information in Multiuser Space-Time Block Coded Systems with Multi-Packet Reception	AU, Edward Kwok Shum
11/972,980	US	01/11/2008	Linear Precoding for MIMO Channels with Outdated Channel State Information in Multiuser Space-Time Block Coded Systems with Multi-Packet Reception	AU, Edward Kwok Shum
12/370,009	US	02/12/2009	Spreading Sequences with Dual Low Correlation Windows for Quasi-Synchronous Code-Division Multiple-Access Communications	WU, Wei Hsiang
12/023,494	US	01/31/2008	Lattice-reduction-aided MIMO Detectors	GAN, Ying Hung
12/431,860	US	04/29/2009	Method and Device for User Cooperative Communication	Dai, Gao Yang



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
PCT/IB2008/003485	WO	04/29/2008	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
	CN	10/30/2009	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
08833210.1	EP	10/29/2009	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
	JP	10/23/2009	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
10-2009-7022549	KR	10/28/2009	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
12/108,485	US	04/23/2008	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
11/758,873	US	06/06/2007	Hybrid Time-Frequency Domain Equalizer Over Broadband Multi-input Multi-Output Channels	ZHU, Yu
11/939,684	US	11/14/2007	Frequency Domain Equalization with Transmit Precoding for High Speed Data Transmission	ZHU, Yu
11/926,541	US	10/29/2007	Robust Timing Synchronization for MB-OFDM Frequency Hopping Systems in a SOP Environment	TSANG, Yui Ming
PCT/IB2009/005380	WO	02/27/2009	Low complexity AGC for MB-OFDM	CHEUNG, Henry Chun
12/039,898	US	02/29/2008	Low complexity AGC for MB-OFDM	CHEUNG, Henry Chun
11/776,050	US	07/11/2007	Robust Joint Erasure Marking And List Viterbi Algorithm Decoder	LI, Tao
12/431,917	US	04/29/2009	Analog Iterative Decoder With Early-termination	LO, Ming Yam
12/020,781	US	01/28/2008	Resource allocation for OFDMA systems with half-duplex relay(s) and corresponding transmission protocol	Edward Shunqing Zhang
12/039,927	US	02/29/2008	Multi-User MIMO Relay Protocol with Self-Interference Cancellation	WENG, Lingfan
11/941,293	US	11/16/2007	Full-rate distributed space-time codes for cooperative communications	ZHANG, Wei
PCT/IB2008/000837	WO	02/28/2008	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
200880007838.6	CN	09/10/2009	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
08762684.2	EP	09/10/2009	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
	JP	09/08/2009	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen



Patent or Application No.	Country	Filing Date	Title of Patent	First inventor name
10-2009-7018962	KR	09/10/2009	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
12/037,974	US	02/27/2008	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
PCT/IB2008/003337	WO	04/21/2008	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
	CN	11/09/2009	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
08827522.7	EP	11/03/2009	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
	JP	10/23/2009	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
10-2009-7023197	KR	11/05/2009	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
12/105,319	US	04/18/2008	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
PCT/IB2008/002767	WO	02/27/2008	Delay-Sensitive Cross Layer Scheduler For Multi-User Wireless Communication Systems	HUI, David, Shui, Wing
08827080.6	EP	10/05/2009	Delay-Sensitive Cross Layer Scheduler For Multi-User Wireless Communication Systems	HUI, David, Shui, Wing
10-2009-7021089	KR	10/08/2009	Delay-Sensitive Cross Layer Scheduler For Multi-User Wireless Communication Systems	HUI, David, Shui, Wing
12/030,412	US	02/13/2008	Delay-Sensitive Cross Layer Scheduler For Multi-User Wireless Communication Systems	HUI, David, Shui, Wing
12/033,664	US	02/19/2008	Optimal cross-layer scheduling for multi-user communication systems with imperfect channel state information and unknown interference	WANG, Rui
PCT/IB2008/003827	WO	09/19/2008	Cross-Layer Multi-Packet Reception Based Medium Access Control and Resource Allocation	BEN LETAIEF, Khaled
11/865,477	US	10/01/2007	Cross-Layer Multi-Packet Reception Based Medium Access Control and Resource Allocation	HUANG, Weilan
12/134,364	US	06/06/2008	Cross layer optimized medium access control	HUANG, Weilan
12/430,604	US	04/27/2009	Iterative Decoding of Punctured Low-density Parity Check Codes by Selection of Decoding Matrices	MOW, Wai Ho
12/023,780	US	01/31/2008	Multiple-input multiple-output signal detectors based on relaxed lattice reduction	GAN, Ying Hung
12/192,497	US	08/15/2008	Robust joint erasure marking viterbi algorithm decoder	LI, Tao
12/032,303	US	02/15/2008	Optimal MIMO ISI channel estimation using loosely synchronized codes and their variations	ZOU, Xiang
12/023,750	US	01/31/2008	Non-binary Source-to-channel Symbol Mappings with Minimized Distortion	CHAN, Ho Yin



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
11/865,643	US	10/01/2007	Low Power Viterbi Decoder Using Scarce State Transition and Path Pruning	Chi Ying Tsui
12/185,987	US	08/05/2008	Low Power Layered Decoding for Low Density Parity Check Decoders	Jie JIN
12/183,005	US	07/30/2008	Polyphase Sequences for Wireless Communications	MOW, Wai Ho
PCT/IB2008/003360	WO	04/10/2008	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
	CN		Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
08840740.8	EP	10/26/2009	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
	JP	10/22/2009	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
10-2009-7022286	KR	10/23/2009	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
12/099,886	US	04/09/2008	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
PCT/IB2008/003432	WO	04/08/2008	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
	CN		Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
08835533.4	EP	10/23/2009	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
	JP	10/22/2009	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
10-2009-7022095	KR	10/22/2009	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
12/062,590	US	04/04/2008	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
PCT/IB2009/005358	WO	02/12/2009	Robust Cooperative Spectrum Sensing for Cognitive Radios	BEN LETAIEF, Khaled
12/031,521	US	02/14/2008	Robust Cooperative Spectrum Sensing for Cognitive Radios	BEN LETAIEF, Khaled
12/425,754	US	04/17/2009	Exploiting Multiple Antennas for Spectrum Sensing in Cognitive Radio Networks	DU, Ke Lin
11/756,773	US	06/01/2007	Asymmetric RFID Tag Antenna	CHENG, Chi Ho
PCT/IB2008/003488	WO	06/03/2008	High Gain RFID Tag Antennas	CHENG, Chi Ho
	CN		High Gain RFID Tag Antennas	CHENG, Chi Ho
08832162.5	EP		High Gain RFID Tag Antennas	CHENG, Chi Ho
	JP		High Gain RFID Tag Antennas	CHENG, Chi Ho
	KR		High Gain RFID Tag Antennas	CHENG, Chi Ho
12/129,953	US	05/30/2008	High Gain RFID Tag Antennas	CHENG, Chi Ho



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
12/129,025	US	05/29/2008	Multiple-Input-Multiple-Output Wireless Communications Cube Antennas	CHIU, Chi Yuk
PCT/IB2008/003850	WO	10/06/2008	Compact 3-port orthogonally polarized MIMO antennas	CHIU, Chi Yuk
11/873,071	US	10/16/2007	Compact 3-port orthogonally polarized MIMO antennas	CHIU, Chi Yuk
11/873,168	US	10/16/2007	Durable wideband antenna fabricated on low resistivity silicon substrate	YAN, Jie Bang
12/054,544	US	03/25/2008	Mobile devices as centers for health information, monitoring and services	TSUI, Chi Ying
12/051,532	US	03/19/2008	Intelligent Agent For Distributed Services For Mobile Devices	TSUI, Chi Ying
12/052,463	US	03/20/2008	Body movement based usage of mobile device	TSUI, Chi Ying
PCT/US08/059036	WO	04/01/2008	Componentization of mobile devices	TSUI, Chi Ying
	CN	12/04/2009	Componentization of mobile devices	TSUI, Chi Ying
10-2009-7020678	KR	10/01/2009	Componentization of mobile devices	TSUI, Chi Ying
12/054,878	US	03/25/2008	Componentization of mobile devices	TSUI, Chi Ying
PCT/US08/059026	WO	04/01/2008	Peer to peer sharing of functionality of mobile devices	TSUI, Chi Ying
	CN	11/04/2009	Peer to peer sharing of functionality of mobile devices	TSUI, Chi Ying
10-2009-7020708	KR	10/01/2009	Peer to peer sharing of functionality of mobile devices	TSUI, Chi Ying
12/054,841	US	03/25/2008	Peer to peer sharing of functionality of mobile devices	TSUI, Chi Ying
12/055,040	US	03/25/2008	Mobile Device Business Models	TSUI, Chi Ying
12/053,861	US	03/24/2008	Power Resource Management	TSUI, Chi Ying
12/054,910	US	03/25/2008	Media Content And Mobile Devices	TSUI, Chi Ying
PCT/US08/059300	WO	04/03/2008	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
	CN	12/04/2009	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
08745039.1	EP	10/02/2009	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
	JP	10/02/2009	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
10-2009-7020691	KR	10/01/2009	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
12/060,949	US	04/02/2008	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
12/028,639	US	02/08/2008	Demosaicking methods and apparatus	AU, Oscar Chi Lim
12/141,152	US	06/18/2008	Bidirectionally Decodable Wyner-Ziv Video Coding	AU, Oscar Chi Lim
12/190,140	US	08/12/2008	Multi-Resolution Temporal Deinterlacing	AU, Oscar Chi Lim



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
12/142,946	US	06/20/2008	Image Characteristic Oriented Tone Mapping for High Dynamic Range Images	AU, Oscar Chi Lim
PCT/US2008/088456	WO	12/29/2008	Motion-Compensated Residue Based Temporal Search Range Prediction	AU, Oscar Chi Lim
12/019,067	US	01/24/2008	Motion-Compensated Residue Based Temporal Search Range Prediction	AU, Oscar Chi Lim
11/860,730	US	09/25/2007	Digital Watermarking for Few-Color Images	AU, Oscar Chi Lim
11/771,663	US	06/29/2007	Lossless Visible Watermarking	AU, Oscar Chi Lim
11/750,591	US	05/18/2007	Generalized Lossless Data Hiding Using Multiple Predictors	AU, Oscar Chi Lim
11/772,536	US	07/02/2007	Block-Based Lossless Data Hiding In The Delta Domain	AU, Oscar Chi Lim
11/774,044	US	07/06/2007	Motion Estimation Optimizations for Video Compression Processes	AU, Oscar Chi Lim
11/855,841	US	09/14/2007	Efficient Real-time Rate Control for video compression processes	AU, Oscar Chi Lim
12/131,179	US	06/02/2008	Finding A Variable Length Code With Optimal Error Recovery	AU, Oscar Chi Lim
12/035,614	US	02/22/2008	Efficient Encoding Processes And Apparatus	AU, Oscar Chi Lim
11/750,137	US	05/17/2007	Three-Loop Temporal Interpolation for Error Concealment of Multiple Description Coding	AU, Oscar Chi Lim
11/750,144	US	05/17/2007	Spatio-Temporal Boundary Matching Algorithm For Temporal Error Concealment	AU, Oscar Chi Lim
PCT/US2008/065887	WO	06/05/2008	Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
	CN		Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
08756728.5	EP	12/01/2009	Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
	JP		Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
	KR		Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
12/132,769	US	06/04/2008	Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
12/147,545	US	06/27/2008	Video transcoding quality enhancement	AU, Oscar Chi Lim
12/192,182	US	08/15/2008	Efficient Temporal Search Range Control For Video Encoding Processes	AU, Oscar Chi Lim
11/929,214	US	10/30/2007	Optimal Heegard-Berger Coding Schemes	AU, Oscar Chi Lim
11/876,026	US	10/22/2007	Efficient error recovery with intra-refresh	AU, Oscar Chi Lim
PCT/US08/73219	WO	08/14/2008	General Data Hiding Framework Using Parity For Minimal Switching	AU, Oscar Chi Lim
12/190,962	US	08/13/2008	General Data Hiding Framework Using Parity For Minimal Switching	AU, Oscar Chi Lim



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
PCT/US08/75397	WO	09/05/2008	Rate Distortion Optimization For Inter Mode Generation For Error Resilient Video Coding	AU, Oscar Chi Lim
11/853,498	US	09/11/2007	Rate Distortion Optimization For Inter Mode Generation For Error Resilient Video Coding	AU, Oscar Chi Lim
12/062,138	US	04/03/2008	Method and apparatus for writing binary data with low power consumption	AU, Oscar Chi Lim
12/147,457	US	06/26/2008	Wyner-Ziv Successive Refinement Video Compression	AU, Oscar Chi Lim
PCT/US08/85482	WO	12/04/2008	Intra Frame Encoding Using Programmable Graphics Hardware	AU, Oscar Chi Lim
12/234,721	US	09/22/2008	Intra Frame Encoding Using Programmable Graphics Hardware	AU, Oscar Chi Lim
12/115,597	US	05/06/2008	Flexible Wyner-Ziv Video Frame Coding	AU, Oscar Chi Lim
12/111,322	US	04/29/2008	Block Parallel and Fast Motion Estimation in Video Coding	AU, Oscar Chi Lim
12/116,731	US	05/07/2008	Error Concealment for Frame Loss in Multiple Description Coding	AU, Oscar Chi Lim
12/246,062	US	10/06/2008	Complexity Adaptive Video Encoding Using Multiple Reference Frames	AU, Oscar Chi Lim
12/246,111	US	10/06/2008	Fast Motion Estimation in Scalable Video Coding	AU, Oscar Chi Lim
12/185,162	US	08/04/2008	Convex optimization approach to image deblocking	AU, Oscar Chi Lim
12/133,617	US	06/05/2008	Free view generation in ray-space	AU, Oscar Chi Lim
12/178,337	US	07/23/2008	Multiple reference frame motion estimation in video coding	AU, Oscar Chi Lim
12/370,835	US	02/13/2009	Color Demosaicking Using Direction Similarity In Color Difference Spaces	AU, Oscar Chi Lim
12/191,933	US	08/14/2008	Multiple Description Encoder And Decoder For Transmitting Multiple Descriptions	AU, Oscar Chi Lim

Assignor represents, warrants and covenants that:

(1) Assignor has the full power and authority, and has obtained all third party consents, approvals and/or other authorizations required to enter into this Agreement and to carry out its obligations hereunder, including the assignment of the Patent Rights to Assignee; and

(2) Assignor owns, and by this document assigns to Assignee, all right, title, and interest to the Patent Rights, including, without limitation, all right, title, and interest to sue for infringement of the Patent Rights. Assignor has obtained and properly recorded



previously executed assignments for the Patent Rights as necessary to fully perfect its rights and title therein in accordance with governing law and regulations in each respective jurisdiction. The Patent Rights are free and clear of all liens, claims, mortgages, security interests or other encumbrances, and restrictions. There are no actions, suits, investigations, claims or proceedings threatened, pending or in progress involving the Patent Rights. There are no existing contracts, agreements, options, commitments, proposals, bids, offers, or rights with, to, or in any person to acquire any of the Patent Rights.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

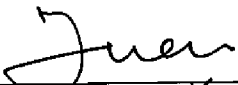
The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.



IN WITNESS WHEREOF this Assignment of Patent Rights is executed at _____
HKUST on 5 March 2010

ASSIGNOR:

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

By: 
Name: Prof. Matthew Yuen
Title: Acting Vice-President for Research & Development
(Signature MUST be attested)

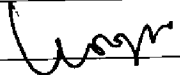
ATTESTATION OF SIGNATURE PURSUANT TO 28 U.S.C. § 1746

The undersigned witnessed the signature of Matthew Yuen to the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. Matthew Yuen is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on 5 March, 2010 to execute the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology.
3. Matthew Yuen subscribed to the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology.

I declare under penalty of perjury under the laws of the United States of America that the statements made in the three (3) numbered paragraphs immediately above are true and correct.

EXECUTED on 5 March 2010 (date)



Print Name: Shirley Woo



ASSIGNMENT OF RIGHTS IN CERTAIN ASSETS

For good and valuable consideration, the receipt of which is hereby acknowledged, The Hong Kong University of Science and Technology, a Hong Kong educational and research institution, with an address at Clear Water Bay, Kowloon, Hong Kong, having the right to hold and to transfer the ownership rights of intellectual property created by its employees and students, (“*Assignor*”), does hereby sell, assign, transfer, and convey unto Hong Kong Technologies Group Limited, a Samoa limited liability company, with an address at Offshore Chambers, P.O. Box 217, Apia, Samoa (“*Assignee*”), or its designees, the right, title, and interest in and to any and all of the following provisional patent applications, patent applications, patents, and other governmental grants or issuances of any kind (the “*Certain Assets*”):

Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
60/810,644	US	06/05/2006	Adaptive Multi-User MIMO Non-Cooperative Threshold Based Wireless Communication System Using Limited Channel Feedback	Wang, Elva Cheng
60/894,092	US	03/09/2007	Robust Rate, Power and Precoder Adaptation for Slow Fading MIMO Channels with Noisy Limited Feedback	WU, Tianyu
60/894,094	US	03/09/2007	Combined Rate and Precoder Design for Slow Fading Correlated MIMO Channels with Limited Feedback	LAU, Vincent Kin Nang
61/116,696	US	11/21/2008	Spreading Sequences with Dual Low Correlation Windows for Quasi-Synchronous Code-Division Multiple-Access Communications	WU, Wei Hsiang
60/914,810	US	04/30/2007	Multiuser Scheduling for MIMO Broadcast Channels with Finite Rate Feedback	ZHANG, Wei
60/894,208	US	03/10/2007	Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks	LO, Ernest, Sze Yuen
60/916,423	US	05/07/2007	Cooperative Concatenated Coding for Wireless Systems	LO, Ernest, Sze Yuen
60/894,123	US	03/09/2007	Delay-Sensitive Cross Layer Scheduler System and Method	HUI, David, Shui, Wing
60/945,363	US	06/21/2007	Cross layer optimized medium access control	HUANG, Weilan
60/956,435	US	08/17/2007	Robust joint erasure marking viterbi algorithm decoder	LI, Tao
60/914,140	US	04/26/2007	Power Control in Cognitive Radio Systems Based on Spectrum Sensing Side Information	HAMDI, Karama
60/913,438	US	04/23/2007	Cluster-based Cooperative Spectrum Sensing in Cognitive Radio Systems	SUN, Chunhua
60/810,706	US	06/05/2006	Asymmetric RFID Tag Antenna	CHENG, Chi Ho
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60/910,109	US	05/10/2007	Advancements for wireless devices and wireless communications	TSUI, Chi Ying
60/907,513	US	04/04/2007	Multimedia Watermarking Techniques With Low Distortion	AU, Oscar Chi Lim
60/900,236	US	02/09/2007	Demosaicking Methods And Apparatus	AU, Oscar Chi Lim



Patent or Application No.	Country	Filing Date	Title of Patent	First Inventor name
60/902,869	US	02/23/2007	Efficient Encoding Processes And Apparatus	AU, Oscar Chi Lim
60/945,995	US	06/25/2007	Rate Distortion Optimization For Video Denoising	AU, Oscar Chi Lim
60/947,149	US	06/29/2007	Video transcoding quality enhancement	AU, Oscar Chi Lim
60/956,438	US	08/17/2007	Efficient Temporal Search Range Control For Video Encoding Processes	AU, Oscar Chi Lim
60/956,457	US	08/17/2007	General Data Hiding Framework Using Parity For Minimal Switching	AU, Oscar Chi Lim
60/907,513	US	04/04/2007	Method and apparatus for writing binary data with low power consumption	AU, Oscar Chi Lim
60/947,209	US	06/29/2007	Wyner-Ziv Successive Refinement Video Compression	AU, Oscar Chi Lim
61/012,102	US	12/07/2007	Intra Frame Encoding Using Programmable Graphics Hardware	AU, Oscar Chi Lim
60/990,671	US	11/28/2007	Complexity Adaptive Video Encoding Using Multiple Reference Frames	AU, Oscar Chi Lim
60/990,774	US	11/28/2007	Fast Motion Estimation in Scalable Video Coding	AU, Oscar Chi Lim
61/056,420	US	05/27/2008	Color Demosaicking Using Direction Similarity In Color Difference Spaces	AU, Oscar Chi Lim
60/935,517	US	08/16/2007	Multiple Description Encoder And Decoder For Transmitting Multiple Descriptions	AU, Oscar Chi Lim

Assignor assigns to Assignee all rights to the inventions, invention disclosures, and discoveries in the assets listed above, together, with the rights, if any, to revive prosecution of claims under such assets and to sue or otherwise enforce any claims under such assets for past, present or future infringement.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to make available to Assignee all records regarding the Certain Assets.

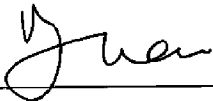
The terms and conditions of this Assignment of Rights in Certain Assets will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.



DATED this 5 day of March 2010.

ASSIGNOR:

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

By: 

Name: Professor Matthew Yuen

Title: Acting Vice-President for Research & Development
(Signature MUST be attested)

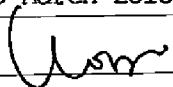
ATTESTATION OF SIGNATURE PURSUANT TO 28 U.S.C. § 1746

The undersigned witnessed the signature of Matthew Yuen to the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. Matthew Yuen is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on March 5, 2010 to execute the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology.
3. Matthew Yuen subscribed to the above Assignment of Patent Rights on behalf of The Hong Kong University of Science and Technology.

I declare under penalty of perjury under the laws of the United States of America that the statements made in the three (3) numbered paragraphs immediately above are true and correct.

EXECUTED on 5 March 2010 (date)



Print Name: Shirley Woo

