## 502147600 12/03/2012

## PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
Chung Ku YIE	11/20/2012
Jeong Hwan OH	11/26/2012
Seok Hyun YOON	11/26/2012

### RECEIVING PARTY DATA

Name:	HUMAX CO., LTD.		
Street Address: 212-1, Yubang-dong, Cheoin-gu			
City: Yongin-si, Gyeonggi-do			
State/Country: JAPAN			
Postal Code: 449-934			

## PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	13701413		

### CORRESPONDENCE DATA

Fax Number: 7032058050

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 703-205-8000

Email: mailroom@bskb.com, majanos@bskb.com

Correspondent Name: Birch, Stewart, Kolasch & Birch, LLP

Address Line 1: P.O. Box 747

Address Line 4: Falls Church, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	5706-0199PUS1	
NAME OF SUBMITTER:	Sandra Majano	

#### Total Attachments: 4

source=2012-12-03 Assignment 5706-0199PUS1#page1.tif source=2012-12-03 Assignment 5706-0199PUS1#page2.tif

source=2012-12-03 Assignment 5706-0199PUS1#page3.tif source=2012-12-03 Assignment 5706-0199PUS1#page4.tif

PATENT REEL: 029390 FRAME: 0449 OP \$40.00 13/01413

502147600

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

## **ASSIGNMENT**

Application No	o.:	13/701,413 November 30, 2012
Insert Name(s) of Inventor(s)	<b>⇒</b>	***(Given Name FAMILY NAME (ALL CAPS))*** WHEREAS, <b>Chung Ku YIE, Jeong Hwan OH, Seok Hyun YOON</b> (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:
Insert Title of Invention		METHOD FOR DIFFERENTIAL PRECODING AND BASE STATION SUPPORTING SAME
		for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)
Insert Date of Signing of Appln.	⇨	
		on <u>11/20/2012</u> and <u>11/26/2012</u> ; and
Insert Name of Assignee	⇔	WHEREAS, HUMAX CO., LTD.
Insert Address of Assignee	⇔	of 212-1, Yubang-dong, Cheoin-gu, Yongin-si, Gyeonggi-do 449-934, Republic of Korea
		its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and
Check Box if Appropriate	⇔	in any foreign countries.
		NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has (have) sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

**REEL: 029390 FRAME: 0450** 

Attorney Docket No.: 5706-0199PUS1

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

In wit	ness whereof, executed by the und	lersigned on the da	ate(s) opposite the undersigned name(s).
Date	20.11.2012	Name of Inventor	(Signature) Chung Ku YIE
Date		Name of Inventor	(Signature) Jeong Hwan OH
Date		Name of Inventor	(Signature) Seok Hyun YOON
Date		Name of Inventor	(Signature)
Date		Name of Inventor	(Signature)
Date		Name of Inventor	(Signature)

BIRCH, STEWART, KOLASCH & BIRCH, LLP

Page 2

BSKB-ASSIGN-SINGLE (09-12) EHC/EHC/jdb

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

## **ASSIGNMENT**

Application No	o.:	13/701,413	Filed: November 30, 2012
Insert Name(s) of Inventor(s)	⇨	WITEKEAS, Chang Ka Tie, Jeong IIwan O	H, Seok Hyun YOON  ave) invented certain new and useful improvements in:
Insert Title of Invention		METHOD FOR DIFFERENTIAL PRECODING	G AND BASE STATION SUPPORTING SAME
		for which an application for Letters Patent of the undersigned (except in the case of a provisional ap	e United States of America has been executed by the plication)
Insert Date of Signing of Appln.	⇔	•	
		on 11/20/2012 and 11/26/2012	; and
Insert Name of Assignee	⇨	WHEREAS, HUMAX CO., LTD.	
Insert Address of Assignee	⇨	of 212-1, Yubang-dong, Cheoin-gu, Yongin-si,	Gyeonggi-do 449-934, Republic of Korea
			gns (hereinafter designated as the Assignee) is desirous nd to said invention and in and to any Letters Patent(s) f America and
Check Box if Appropriate	⇔	in any foreign countries.	
		the undersigned has (have) sold, assigned and transfer unto said Assignee the full and exclu America, its territories, dependencies and possessi and all Letters Patent(s) which may be granted the dependencies and possessions, and if the box above	deration, the receipt of which is hereby acknowledged, ansferred, and by these presents does (do) sell, assign sive right to the said invention in the United States of ons and the entire right, title and interest in and to any herefor in the United States of America, its territories, e is designated, in any and all foreign countries; and to inversions and extensions thereof for the full term or

BIRCH, STEWART, KOLASCH & BIRCH, LLP

Page 1

REEL: 029390 FRAME: 0452

Attorney Docket No.: 5706-0199PUS1

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	Name of Inventor	(Signature) Chung Ku YIE
Date 100.26.2012	Name of Inventor	(Signature) Jeong Hwan OH
Date Nov. 26, 20/2	Name of Inventor	
Date	Name of Inventor	(Signature)
Date	Name of Inventor	(Signature)
Date	Name of Inventor	(Signature)
BIRCH, STEWART, KOLASCH & BIRCH, LLP	P	age 2 BSKB-ASSIGN-SINGLE (00.20)

PATENT REEL: 029390 FRAME: 0453

EHC/EHC/idb

**RECORDED: 12/03/2012**