PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| IN HWAN CHOI | 08/08/2001 |
| YOUNG MO GU | 08/08/2001 |
| KYUNG WON KANG | 08/08/2001 |
| KOOK YEON KWAK | 08/08/2001 |

RECEIVING PARTY DATA

| Name: | LG ELECTRONICS INC. |
|-----------------|-------------------------------|
| Street Address: | 20, YOIDO-DONG, YONGDUNGPO-GU |
| City: | Seoul |
| State/Country: | REPUBLIC OF KOREA |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12839324 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 2080-3021C2C1C10C2C3C1 |
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| NAME OF SUBMITTER: | Lew Edward V. Macapagal, Esq. |

Total Attachments: 2

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PATENT REEL: 024708 FRAME: 0817

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PATENT REEL: 024708 FRAME: 0818

ASSIGNMENT

Insert Name(s) of Inventor(s)

In Hwan CHOI **Kyung Won KANG** Young Mo GU Kook Yeon KWAK

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

Insert name of Assignee

LG Electronics Inc.

Insert state of incorporation of

Republic of Korea

Assignee Insert address of Assignee

20, Yoido-dong, Youngdungpo-gu, Seoul, Korea

(hereinafter designated as the Assignee) the entire worldwide right, title and interest in

the invention known as

Insert identification of Invention, such as Title, Case Number or Foreign Application Number

VSB RECEPTION SYSTEM WITH ENHANCED SINGAL DETECTION FOR PROCESSING SUPPLEMENTAL DATA

for which the undersigned has (have) executed an application for patent in the United States of America and all patent applications in foreign countries corresponding thereto or based thereon.

insert Date of Signing of Application

August 8, 2001

- The undersigned agree(s) to execute all papers necessary in connection with any original, reissue, divisional and continuing United States and foreign applications for the above-identified invention 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 or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interierence.
- The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for 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 patent to the Assignee.
- The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed any agreement in conflict herewith.

The undersigned hereby appoints JONATHAN Y. KANG, REG. NO. 38,199; RICHARD K. YOON, REG. NO. 42,247; EDWARD GRAY, REG. NO. 35,166; DAVID N. MAKOUS, REG. NO. 29,559; JOHN S. CHRISTOPHER, REG. NO. 30.937

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 United States Patent and Trademark Office for recordation of this document.

Date: 2001. f.f

Signature of Inventor 71 0 184

Date:

Signature of Inventor

Date: >001, 8.8

Date: 200/. 8/8

Signature of inventor

Signature of inventor

PATENT REEL: 024708 FRAME: 0819

2080-3-21C2

ASSIGNMENT

Insert Neme(s) of inventor(s)

In Hwan CHO! Kyung Won KANG Young No GU Kook Yeen KWAK

In consideration of the sum of one dollar (\$1,00) and other good and valuable considerations poid to each of the undersigned, the undersigned agree(a) to assign, and hereby does assign, transfer and set over to

Insert name of Assignee

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Insert state of Incorporation of

Republic of Korea

Assignee

of

insert address of Assignee

20, Yoldo-dong, Youngdungpo-gu, Seoul, Korea

(hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as

Insert Identification of Invention, such as Title, Case Number or Foreign Application Number VSB RECEPTION SYSTEM WITH ENHANCED SINGAL DETECTION FOR PROCESSING SUPPLEMENTAL DATA

for which the undersigned has (have) executed an application for patent in the United States of America—and all patent applications in foreign countries corresponding thereto or based thereon.

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- 3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the international Convention for Protection of Industrial Property or similar agreements.
- 4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Azsignee.
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August 8, 2001

Signature of Inventor

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Date:

Signature of Inventor

Date:

Signature of Inventor

PATENT REEL: 024708 FRAME: 0820

RECORDED: 07/19/2010