

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | |
|---|---|---------------|-------------------------------|---------------------|---|-------|-------------|----------------|--------------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hyun-Soo KIM</td> <td>07/20/2012</td> </tr> </tbody> </table> | | Name | Execution Date | Hyun-Soo KIM | 07/20/2012 | | | | |
| Name | Execution Date | | | | | | | | |
| Hyun-Soo KIM | 07/20/2012 | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>Samsung Electronics Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>129, Samsung-ro, Yeongtong-gu, Suwon-si</td> </tr> <tr> <td>City:</td> <td>Gyeonggi-do</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> </table> | | Name: | Samsung Electronics Co., Ltd. | Street Address: | 129, Samsung-ro, Yeongtong-gu, Suwon-si | City: | Gyeonggi-do | State/Country: | KOREA, REPUBLIC OF |
| Name: | Samsung Electronics Co., Ltd. | | | | | | | | |
| Street Address: | 129, Samsung-ro, Yeongtong-gu, Suwon-si | | | | | | | | |
| City: | Gyeonggi-do | | | | | | | | |
| State/Country: | KOREA, REPUBLIC OF | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13558606</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13558606 | | | | |
| Property Type | Number | | | | | | | | |
| Application Number: | 13558606 | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | |
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| ATTORNEY DOCKET NUMBER: | 5000-1-1147CIP | | | | | | | | |
| NAME OF SUBMITTER: | Steve Cha | | | | | | | | |
| Total Attachments: 1 source=5000-1-1147CIP_Assignment#page1.tif | | | | | | | | | |

CH \$40.00 13558606

Assignment of Invention and Patent Application

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consid-
eration of TEN (\$10.00) DOLLAR,

1) Hyun-Soo KIM of
#108-201, Samsung Chereville APT., Sinbong-dong, Suji-gu, Yongin-si,
Gyeonggi-do, Republic of Korea

(hereinafter Assignor) hereby sells, assigns, transfers, and sets over unto:

**SAMSUNG ELECTRONICS CO., LTD. of
129, SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO 443-742,
REPUBLIC OF KOREA**

(hereinafter Assignee) the entire right, title and interest for the United States Of America as
defined in 35 U.S.C. § 1.00, in and to the invention entitled as:

**APPARATUS AND METHOD FOR COMPARING FRAMES USING SPECTRAL
INFORMATION OF AUDIO SIGNAL**

invented by Assignor; the application for United States patent therefor, invented by Assignor;
any patent or reissues of any patent that may be granted thereon; and any applications which are
continuations, continuation-in-part, substitutes, or divisions of said application. Assignor
authorizes Assignee to enter the date of signature and/or Serial Number and Filing Date in the
above. Assignor also authorizes and requests the Commissioner of Patents and Trademarks to
issue any resulting patent(s) to the said Assignee, for its interests as Assignee, its successors,
assigns and legal representatives. The undersigned agrees that the attorney of record in said
application shall hereafter act on behalf of said Assignee; and Assignor further conveys to
Assignee all priority rights resulting from the above-identified application for United States
Patent. Assignor agrees to execute all papers, give any required testimony and perform other
lawful acts, as deemed essential by Assignee to perfect Assignee's interest in any resulting patent
of the United States, and to acquire, hold, enforce, convey, and uphold the validity of said patent
and reissues and extensions thereof, and Assignee's interest therein.

SIGNED ON THE DATES(S) INDICATED BESIDE MY/OUR SIGNATURE(S):

Name of First Inventor: Hyun-Soo KIM



Signature of inventor

Dated: July 20, 2012

WITNESSED: 