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*Practice Limited to Matters and Proceedings
before Federal Courts and Agencies; not
Admitted in VA

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Patent, Trademark and Copyright Causes,
Unfair Competition, Trade Secrets,
Licensing, Litigation

March 15, 2013

Mr. B. J. Jeong
DAE-A INTERNATIONAL IP & LAW FIRM
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Re: U.S. Patent No. 8,391,800 B2
U.S. Patent Application No. 13/250,082
Title: Signal Acquisition Apparatus and Method for Distributed
Compressive Sensing and Joint Signal Recovery
Inventor(s): Lee, et al.
Ref(s): 31850U / GWP119015US

Dear Mr. Jeong:

We are pleased to enclose the Official Letters Patent for the captioned invention. The patent issued on **March 5, 2013**, as **U.S. Patent No. 8,391,800 B2**. Five (5) soft copies of the patent are enclosed for your convenience.

The patent will be enforceable for a period beginning with the date of grant and ending on a date that is twenty years from the earliest effective filing date. This patent is enforceable from **March 5, 2013**, through **October 13, 2031**, which includes the thirteen (13) days of Patent Term Adjustment.

As you are aware, maintenance fees must be paid to the U.S. Patent and Trademark Office between the 3 to 3½ years, 7 to 7½ years, and 11 to 11½ years after the date of the patent grant, or within a 6 month grace period thereafter upon payment of a surcharge, to keep the patent in force.

First: (3 to 3½ yrs) March 5, 2016 to September 5, 2016	Second: (7 to 7½ yrs) March 5, 2020 to September 5, 2020	Third: (11 to 11½ yrs) March 5, 2024 to September 5, 2024
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Mr. B. J. Jeong
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Ref(s): 31850U / GWP119015US
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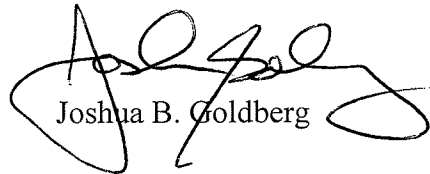
Any packaging containing any product sold in connection with the patented technology should display a statutory notice of the patent, i.e., "U.S. Patent Number 8,391,800".

Please maintain the original Letters Patent in a secure location. Only one original grant is ever printed by the Patent Office. In this regard, kindly sign and return a copy of the Action Sheet to us acknowledging receipt of the formal Letters Patent.

We appreciate the opportunity to assist you in this matter. Please feel free to call if you have any questions or comments.

Very truly yours,

NATH, GOLDBERG & MEYER



Joshua B. Goldberg

Enclosure(s): Action Sheet
Official Letters Patent
Five (5) Soft Copies

JBG/hk

Mr. B. J. Jeong
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March 15, 2013
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ACTION SHEET

- Received the Official Letters Patent No. 8,391,800 B2 issued on March 5, 2013.
- Please **do not** set up a maintenance file for this patent. Another source will be responsible for the maintenance fee payments.
- Other: _____.

By: _____ Date: _____

Please return to:

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The
United
States
of
America



The Director of the United States
Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Lucia Staret Kea

Acting Director of the United States Patent and Trademark Office



US008391800B2

(12) **United States Patent**
Lee et al.

(10) **Patent No.:** **US 8,391,800 B2**
(45) **Date of Patent:** **Mar. 5, 2013**

(54) **SIGNAL ACQUISITION APPARATUS AND METHOD FOR DISTRIBUTED COMPRESSIVE SENSING AND JOINT SIGNAL RECOVERY**

(58) **Field of Classification Search** 455/423, 455/67.11, 130, 132, 137, 226.1, 134, 135, 455/140; 702/47, 52, 53, 122
See application file for complete search history.

(75) **Inventors:** **Heung-No Lee, Gwangju (KR); Junho Lee, Gwangju (KR); Sangjun Park, Gwangju (KR)**

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(73) **Assignee:** **Gwangju Institute of Science and Technology, Buk-gu Gwangju (KR)**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 13 days.

* cited by examiner

Primary Examiner — Sonny Trinh

(21) **Appl. No.:** **13/250,082**

(74) *Attorney, Agent, or Firm* — Nath, Goldberg & Meyer; Joshua B. Goldberg; Scott C. Langford

(22) **Filed:** **Sep. 30, 2011**

(57) **ABSTRACT**

(65) **Prior Publication Data**

US 2012/0083230 A1 Apr. 5, 2012

Disclosed is a multiple sensor system including a plurality of different sensor devices to acquire respective signals sensed from a single signal source, and a signal acquisition apparatus to recover an original signal generated from the signal source. The signal acquisition apparatus recovers the original signal by applying joint recovery, based on characteristics and correlations between the respective sensor devices, to compressive sensing signals independently compressively sensed and transmitted from the respective sensor devices. At this time, a sensing matrix F prearranged with the respective sensor devices and channel information C between the original signal and each sensor device are used for joint recovery.

(30) **Foreign Application Priority Data**

Oct. 1, 2010 (KR) 10-2010-0096128

(51) **Int. Cl.**
H04B 17/00 (2006.01)
H04W 24/00 (2009.01)

(52) **U.S. Cl.** **455/67.11; 455/140; 455/423**

9 Claims, 3 Drawing Sheets

