



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

(10) **Patent No.:** **US 8,405,551 B2**  
(45) **Date of Patent:** **\*Mar. 26, 2013**

(54) **LOCATION ESTIMATION SYSTEM, METHOD AND PROGRAM**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(21) Appl. No.: **13/370,457**

(22) Filed: **Feb. 10, 2012**

(65) **Prior Publication Data**

US 2012/0143814 A1 Jun. 7, 2012

**Related U.S. Application Data**

(63) Continuation of application No. 12/257,437, filed on Oct. 24, 2008, now Pat. No. 8,138,974.

(30) **Foreign Application Priority Data**

Oct. 25, 2007 (JP) ..... 2007-277207

(51) **Int. Cl.**

**G01S 3/02** (2006.01)  
**G01S 5/02** (2010.01)

(52) **U.S. Cl.** ..... **342/451; 342/417**

(58) **Field of Classification Search** ..... **342/451, 342/417**

See application file for complete search history.

(57) **ABSTRACT**

Location estimation systems, methods, and non-transitory computer program products. The system includes: storage means provided in the computer, means for storing the vector datasets in the storage means of the computer, means for calculating the similarity between the vector dataset without any location label and each neighboring vector dataset with a location label, by using any one of a q-norm where  $0 \leq q \leq 1$  and an exponential attenuation function, and means for estimating the location label of the vector data without any location label from the calculated similarities.

**20 Claims, 6 Drawing Sheets**

