TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371	ATTORNEY'S DOCKET NUMBER **4900-0009** U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/KR2006/001444	**April 19, 2006**	**April 19, 2005**

TITLE OF INVENTION

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLICANT(S) FOR DO/EO/US

Jin-Seung CHOI; Jae-Chul LIM; Jae-Bum PARK; Hong-Keun JI; Jong-Ho KIM; Do-Wan KIM; Hyun-Jun OH; Dong-Won NA; and Won-Hee SULL

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) as indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☒ is transmitted hereto (required only if not communicated by the International Bureau).
   b. ☒ has been communicated by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. ☐ is attached hereto.
   b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   b. ☐ have been communicated by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendment has NOT expired.
   d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98; PTO-1449 Form and Foreign References
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☒ An Application Data Sheet under CFR 1.76
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13*ter*.2 and 37 CFR 1.821–1.825
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4)
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)
20. ☐ Other items or information:

Samsung v. Hermes
IPR2025-00953
Exhibit 1004

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
	PCT/KR2006/00001444	**4900-0009**

The following fees are submitted:	CALCULATIONS	PTO USE ONLY
21. ☒ Basic national fee (37 CFR 1.492(a)) **$310.00**	**$ 310.00**	
22. ☒ Examination fee (37 CFR 1.492(c)) If the written opinion prepared by USI/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** All other situations **$210.00**	**$ 210.00**	
23. ☒ Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority ..... **$100.00** International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... **$410.00** All other situations **$510.00**	**$ 410.00**	
TOTAL OF 21, 22 and 23 =	**$ 930.00**	
☐ Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)). The fee is **$250** for each additional 50 sheets of paper or fraction thereof		

Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round **up** to a whole number)	RATE		
17- 100 =	0/50 =0	0	× $260.00	$	
Surcharge of **$130.00** for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				**$ 130.00**	

CLAIMS	NUMBER FILED		NUMBER EXTRA	RATE		
Total Claims	23	- 20 =	3	× $ 50.00	**$ 150.00**	
Independent Claims	2	- 3 =	0	× $210.00	$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ $370.00	$	
				TOTAL OF ABOVE CALCULATIONS =	**$ 1210.00**	
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.					$	
				SUBTOTAL =	**$ 1210.00**	
Processing fee of **$130.00** for furnishing the English translation later than the 30 months from the earliest claimed priority date (37 CFR 1.492(f)). +					**$ 0.00**	
				TOTAL NATIONAL FEE =	**$ 1210.00**	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +					**$ 0.00**	
				TOTAL FEES ENCLOSED =	**$ 1210.00**	
					Amount to be refunded:	
					Amount to be charged	

a. ☐ A check in the amount of $ _____.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 07-1337 in the amount of $ ___ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy of this sheet is enclosed.

d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. Kindly use the attorneys' address associated with the following Customer Number for future correspondence.

SEND ALL CORRESPONDENCE TO:

LOWE HAUPTMAN HAM & BERNER, LLP
1700 Diagonal Road, Suite 300
Alexandria, VA 22314
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Customer No. 22429
PATENT TRADEMARK OFFICE

/Yoon S. Ham/
SIGNATURE
Yoon S. HAM
NAME
45,307
REGISTRATION NUMBER

PTO/SB/14 (08-05)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Applicant Information:

Applicant 1 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jin-Seung		CHOI	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Seoul	Country Of Residence[i]	KR
Citizenship under 37 CFR 1.41(b)[i]	KR		

Mailing Address of Applicant:

Address 1	120-402 HanjinGrangvill Apt., Wolgye 3-dong		
Address 2	Nowon-gu		
City	Seoul	State/Province	
Postal Code	101-125	Country[i]	KR

Applicant 2 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jae-Chul		LIM	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Seoul	Country Of Residence[i]	KR
Citizenship under 37 CFR 1.41(b)[i]	KR		

Mailing Address of Applicant:

Address 1	101-902 Gyeonghyangrexvill, Sangdo 4-dong		
Address 2	Dongjak-gu		
City	Seoul	State/Province	
Postal Code	156-034	Country[i]	KR

Applicant 3 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jae-Bum		PARK	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Seoul	Country Of Residence[i]	KR

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

Citizenship under 37 CFR 1.41(b) i	KR			
Mailing Address of Applicant:				
Address 1	102-505 Dongyang Express Apt., Umyeon-dong			
Address 2	Seocho-gu			
City	Seoul	**State/Province**		
Postal Code	137-781	**Country**i	KR	

Applicant 4 Remove

Applicant Authority ◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118	
Prefix	**Given Name**	**Middle Name**	**Family Name**	**Suffix**
	Hong-Keun		JI	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service			
City	Seoul	**Country Of Residence**i	KR
Citizenship under 37 CFR 1.41(b) i	KR		
Mailing Address of Applicant:			
Address 1	101-203 Kolon Apt., Daerim 3-dong, Yeongdeungpo-gu		
Address 2			
City	Seoul	**State/Province**	
Postal Code	150-073	**Country**i	KR

Applicant 5 Remove

Applicant Authority ◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118	
Prefix	**Given Name**	**Middle Name**	**Family Name**	**Suffix**
	Jong-Ho		KIM	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service			
City	Seoul	**Country Of Residence**i	KR
Citizenship under 37 CFR 1.41(b) i	KR		
Mailing Address of Applicant:			
Address 1	111-1003 Hyundai Apt., 82, Muak-dong, Jongno-gu		
Address 2			
City	Seoul	**State/Province**	
Postal Code	110-797	**Country**i	KR

Applicant 6 Remove

Applicant Authority ◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118	
Prefix	**Given Name**	**Middle Name**	**Family Name**	**Suffix**
	Do-Wan		KIM	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service			
City	Goyang-si, Gyeonggi-do	**Country Of Residence**i	KR
Citizenship under 37 CFR 1.41(b) i	KR		

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

Mailing Address of Applicant:			
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Address 2	Ilsan-gu		
City	Goyang-si, Gyeonggi-do	**State/Province**	
Postal Code	410-815	**Country**[i]	KR

Applicant 7 Remove

Applicant Authority (•) Inventor ( ) Legal Representative under 35 U.S.C. 117 ( ) Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Hyun-Jun		OH	

Residence Information (Select One) ( ) US Residency (•) Non US Residency ( ) Active US Military Service

City	Seoul	**Country Of Residence**[i]	KR
Citizenship under 37 CFR 1.41(b) [i]	KR		

Mailing Address of Applicant:			
Address 1	629-15 Irwon-dong, Gangnam-gu		
Address 2			
City	Seoul	**State/Province**	
Postal Code	135-230	**Country**[i]	KR

Applicant 8 Remove

Applicant Authority (•) Inventor ( ) Legal Representative under 35 U.S.C. 117 ( ) Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Dong-Won		NA	

Residence Information (Select One) ( ) US Residency (•) Non US Residency ( ) Active US Military Service

City	Seongnam, Gyeonggi-do	**Country Of Residence**[i]	KR
Citizenship under 37 CFR 1.41(b) [i]	KR		

Mailing Address of Applicant:			
Address 1	214-804 Mujigaemaeul LG Apt., Gumi-dong		
Address 2	Bundang-gu		
City	Seongnam, Gyeonggi-do	**State/Province**	
Postal Code	463-705	**Country**[i]	KR

Applicant 9 Remove

Applicant Authority (•) Inventor ( ) Legal Representative under 35 U.S.C. 117 ( ) Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Won-Hee		SULL	

Residence Information (Select One) ( ) US Residency (•) Non US Residency ( ) Active US Military Service

City	Seoul	**Country Of Residence**[i]	KR
Citizenship under 37 CFR 1.41(b) [i]	KR		

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

Mailing Address of Applicant:			
Address 1	101-404 Hanareum Apt., Suseo-dong, Gangnam-gu,		
Address 2			
City	Seoul	**State/Province**	
Postal Code	135-884	**Country**[i]	KR

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	22429		
Email Address	yham@ipfirm.com	Add Email	Remove Email

Application Information:

Title of the Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA		
Attorney Docket Number	4900-0009	**Small Entity Status Claimed**	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		**Sub Class (if any)**	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	5	**Suggested Figure for Publication (if any)**	

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application has not been and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ US Representative (37 CFR 11.9)
Customer Number	22429		

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

Domestic Priority Information:

This section allows for the applicant to claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c). Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	a 371 of international	PCT/KR2006/001444	2006-04-19

Additional Domestic Priority Data may be generated within this form by selecting the **Add** button. Add

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove

Application Number	Country [i]	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
10-2005-0032452	KR	2005-04-19	(•) Yes ( ) No

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.

Assignee 1 Remove

If the Assignee is an Organization check here. ☒			
Organization Name	SK TELECOM CO., LTD.		
Mailing Address Information:			
Address 1	11, Euljiro 2-ga, Jung-gu		
Address 2			
City	Seoul	**State/Province**	
Country [i] KR		Postal Code	100-844
Phone Number		Fax Number	
Email Address			

Additional Assignee Data may be generated within this form by selecting the **Add** button. Add

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.

Signature	/Yoon S. Ham/	Date (YYYY-MM-DD)	2007-10-18

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Approved for use through 07/31/2006. OMB 0651-0032
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	4900-0009
	Application Number	
Title of Invention	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	

First Name	Yoon	Last Name	Ham	Registration Number	45307

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 October 2006 (26.10.2006)

PCT

(10) International Publication Number
WO 2006/112656 A1

(51) International Patent Classification:
H04B 7/26 (2006.01)

(21) International Application Number:
PCT/KR2006/001444

(22) International Filing Date: 19 April 2006 (19.04.2006)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2005-0032452 19 April 2005 (19.04.2005) KR

(71) Applicant *(for all designated States except US)*: **SK TELECOM CO., LTD.** [KR/KR]; 11, Euljiro 2-ga, Jung-gu, Seoul 100-844 (KR).

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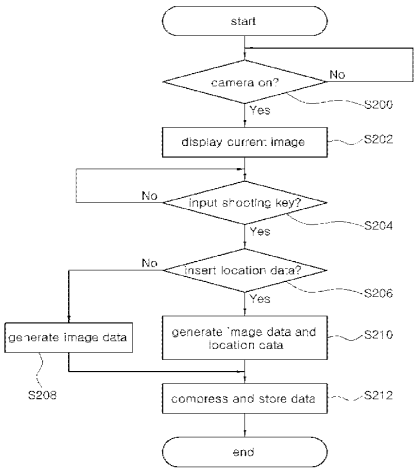
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[Continued on next page]

(54) Title: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA



(57) Abstract: The present invention relates to a location-based service method and system using location data included in image data, particularly to a method and a system of providing the location-based service with photos taken by a camera phone, using location information at the shooting time. The location-based service method according to the present invention, using the image data provided using a terminal equipped with a camera and the location data including the location information of the terminal, comprises the steps of shooting a target image with the terminal at a predetermined location and generating first image data; receiving the location data; including the received location data in the first image data and generating second image data; and displaying an image corresponding to the first image data and providing a service using the location data, if the second image data are selected.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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— *with international search report*

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Description

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

Technical Field

[1] The present invention relates to a method and a system of providing various services using photos taken by a camera phone, particularly to a method and a system of providing various services, including location information at the shooting time, with the photos taken by the camera phone.

Background Art

[2] Recently, as electronic parts become high sensitive, smaller and lighter, a mobile communication terminal is getting more downsized, and the function of the mobile communication terminal is getting various according to the needs of consumers. In addition to a calling function of the mobile communication terminal, a game function, an Internet retrieving function, an e-mail receiving and transmitting function, payment-settling function, etc. become generalized. In addition, the mobile communication terminal (camera phone), additionally having a camera function shooting a shape of an object with an equipped camera lens and an image transmitting function transmitting the shape of the object shot by the camera to computers or others' mobile communication terminals, becomes commercialized.

[3] However, since the shot photo has only image information, the conventional camera phone is limited to play a role of showing a user the image information or showing others only the shot photo by transmitting the image information to their mobile communication terminals or computers.

Disclosure of Invention

Technical Solution

[4] The present invention is provided to overcome the foregoing stated limit which the conventional camera phone contains. The object of the present invention is to provide a service of showing the user the shot location by map or guiding the user to the location when the user or others view the shot photo through the terminal, by including station information of the shot location or global positioning information of a GPS terminal in the image information at the time of shooting the photo with the camera phone.

[5] According to the present invention, by using a method of inserting and storing the location information at the shooting time on the photo shot by the terminal equipped with the camera, it is possible to provide various location-based services using the shot location information as well as view the corresponding photo.

[6] The location-based service using the location information included in photo in-

formation enables the user who views the photo to obtain the geographical location information by providing map information on the shot location, and enables the user to get to the location as quickly as possible when the location in the photo catches the fancy of the user by providing a service of guiding the user to the location in conjunction with a navigation system.

[7] The location-based service method, according to the present invention, using image data provided through a terminal equipped with a camera and location data including location information of the terminal, comprises the steps of: shooting a target image with the terminal at a predetermined location and generating first image data; receiving the location data; including the received location data in the first image data and generating second image data; and displaying an image corresponding to the first image data and providing a service using the location data, if the second image data are selected.

[8] Selectively, the terminal comprises a camera phone or a digital camera which can receive the location data.

[9] The terminal according to the present invention, which is equipped with the camera and can receive the location data, comprises a camera section shooting the image at the predetermined location and generating the first image data; a location data processing section including the location data of the terminal in the first image data and generating the second image data; and an image data storing section receiving and storing the second image data.

[10] The location-based service system including the terminal according to the present invention comprises a location data providing system providing the location data of the terminal and a service system providing a service based on the location data according to the user's selection.

Brief Description of the Drawings

[11] FIG. 1 is an outlined diagram showing a terminal having a photo shooting function and a location information processing function according to one preferred embodiment of the present invention.

[12] FIG. 2 is a flow chart showing a method of storing first image data and second image data including location data according to another preferred embodiment of the present invention.

[13] FIG. 3 is a flow chart showing a method of providing a map of the shot location to the user as a location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[14] FIG. 4 is an outlined diagram showing a system of providing a map of the shot

location to the user as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[15] FIG. 5 is a flow chart showing a method of providing a service of guiding the user to the shot location as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[16] FIG. 6 is a flow chart showing a system of providing a service of guiding the user to the shot location as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

Best Mode for Carrying Out the Invention

[17] The details and the improved matters of the present invention are disclosed in dependent claims.

[18] Hereunder, with reference to the attached drawings, a preferred embodiment of the present invention is explained in detail.

[19] FIG. 1 illustrates a constitution view of the terminal having the shooting function and the location information processing function according to one preferred embodiment of the present invention.

[20] Referring to FIG. 1, the terminal comprises a control section (10), a key inputting section (20), a display section (30), a camera section (40), a location data processing section (50), a compression controller (60), an image data storing section (70), an outer interface section (80) and a RF section (90).

[21] Selectively, the terminal can comprise a digital camera supported by a satellite receiving module.

[22] The control section (10) controls the receiving and transmitting of a radio frequency signal through the RF section (90), and controls the photo shooting and the output of the shot image data. The key inputting section (20) receives the user's instructions for the photo shooting and the output of the shot image data, and transmits the same to the control section (10). The display section (30) displays the contents related to the photo shooting which are transmitted from the control section (10) and informs the user of the same, and displays the image data transmitted from the control section (10).

[23] The camera section (40) shoots an object through a camera lens according to the control of the control section (10), converts the image of the shot object into a digital signal, captures consecutive digital signals as still pictures, and generates the first image data. Herein, the control section (10) controls the shooting function of the

camera section (40) according to the user's instructions through the key inputting section (20). Subsequently, the camera section (40) provides the image data to the location information processing section (50).

[24] The location information processing section (50) includes the location data received from a location information providing means (not illustrated) in the first image data generated in the camera section (40). The location information providing means can be a GPS means using a satellite or CPS means using a base station information.

[25] The means using the base station information, by means of CPS (Cell Positioning System), retrieves a particular cell in which a corresponding private mobile terminal is located and obtains the location information of the private mobile terminal. As noted, a person skilled in the art sectionalizes a service region into predetermined cells in order to provide a mobile communication service of a cellular or a PCS, and provides each cell with at least one base station. The private mobile terminal positioned in one cell performs a predetermined communication with the base station, thereby performing the processes of synchronization and paging, etc. with the base station. The location information of the private mobile terminal which is obtained by the paging with the base station is recorded in a home location registry (HLR), and, using the location information of the private mobile terminal recorded in HLR, performs a method of providing the service using the location information of the private mobile terminal according to the following present invention.

[26] The terminal using the GPS (Global Positioning System) means which utilize a satellite receives the location data of the current altitude, direction, etc. through a GPS antenna contained in the terminal from the satellite floating over the earth.

[27] The compression controller (60), according to the control of the control section (10), receives the first image data output from the location data processing section (50) and the second image data including the location data, compresses and stores the same in the image data storing section (70). The outer interface (80) is connected to the computer, etc. so that the image data stored in the image data storing section (70) can be displayed.

[28] FIG. 2 illustrates a flowchart of the method of storing the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[29] Referring to FIG. 2, the first thing is to check whether or not a camera shooting mode is set to "on" (S200). If the camera shooting mode is set to "on", the current image of the location which the user wants to shoot is displayed on the display section (S202). Subsequently, if the user input a photo shooting key (S204), the current image is shot, and a menu inquiring about whether to insert the location data is displayed (S206). In addition, selectively, the step (S206) can be performed after the first image

data are generated and stored. If the user does not want to insert the location data into the shot image data, the shot first image data are generated and transmitted to the compression controller, and the compression controller compresses and stores the first image data on the image data storing section (S208). If the user chooses to insert the location data, the location data processing section inserts the location data into the shot first image data and generates the second image data (S210). As in the step (S208), the compression controller compresses and stores the first image data and the second image data including the location data on the image data storing section (S212).

[30] The stored second image data can be transmitted to another mobile terminal through a wireless network, and the mobile terminal includes a PCS phone, a cellular phone, a PDA phone, etc. In addition, the data can be transmitted to a fixed terminal through an outer interface, and can be uploaded on a web page through an Internet network.

[31] FIGS. 3 and 4 illustrate a method and a system of providing the map of the location where the user shoots the photo in the terminal using the location data included in the second image data.

[32] Referring to FIG. 3, the first thing is for the user to select the stored photo in the terminal (S300). Herein, the stored photo includes the shot first image data and the location data of the terminal corresponding to the shot location. Subsequently, a menu inquiring about whether to select a map providing service is displayed (S302), and if the user does not want the map of the shot location, only the shot photo is displayed on the display section (S304). If the user selects the map providing service (S306), the map of the shot location is provided by a map data providing server and the map is displayed by a map providing section contained in the terminal. Selectively, after the step (S306), a step of selecting a type of the map, or a step of selecting a scale, etc. can be additionally included. In the map, the traffic information, the geographical information, etc. of the shot location can be included, and the latitude, the longitude, and the administrative district address of the shot location can be displayed.

[33] Referring to FIG. 4, the system of providing the map of the location where the user shoots the photo in the terminal using the location data included in the image data according to one preferred embodiment of the present invention, comprises a terminal (30) containing a map providing section; a communication network (40); and a map providing system (50) consisting of a user receiving section (51), a control section (52), a map data selecting section (53), a map DB (54) and a user transmitting section (55).

[34] The map DB (54) maintains a map corresponding to the location data which the terminal of the user provides. The control section (52) controls the function within the map providing system (50). The user receiving section (51) receives a request of the map data related to optional location data through the communication network (40)

from the terminal (30). In response to the input of the request, the map data selecting section (53) selects any one of the map data maintained in the map DB (54) according to a predetermined standard. The user transmitting section (53) transmits the selected map datum to the terminal (30).

[35] FIGS. 5 and 6 illustrate a method and a system of providing a guiding service in conjunction with a navigation system using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[36] Referring to FIG. 5, the first thing is for the user to select the stored photo in the terminal (S400). Herein, the stored photo was stored as the shot first image data and the location data of the terminal corresponding to the shot location. Subsequently, a menu inquiring about whether to select the guiding service is displayed (S402), and if the user does not want the guiding service to the shot location, only the shot photo is displayed on the display section (S404). If the user selects the guiding service, the navigation data corresponding to the location data of the shot location are transmitted to the terminal by the navigation system, and the guiding service by means of a navigator of the terminal, including the shortest route to the shot location, the traffic condition, etc., is displayed on the display section (S406).

[37] Referring to FIG. 6, the system of providing the service of guiding the user to the shot location using the first image data and the location data of the terminal according to another preferred embodiment of the present invention comprises a terminal (60) equipped with a navigator, a communication network (70) and a navigation system (80).

[38] The terminal (60) transmits the location data (shot location) of the terminal to the communication network (70) on the service request, and the communication network transmits the location data including the location data of the current terminal to the navigation system (80). The navigation system (80) can comprise a map information section, a GIS (Geography Information System) section, a transmitting and receiving section, an operating section, a control section, etc. (not illustrated), and generates navigation data based on the location data of the terminal, transmits the same to the terminal (60) through the communication network (70). The navigator (not illustrated) of the terminal (60) receives and displays the navigation information on the display section.

[39] The guiding service can be provided to the user using the terminal at the time of moving a vehicle or walking.

[40] Although the present invention has been described in accordance with the preferred embodiments, the embodiments are merely illustrative, and are not limited to the scope of the present invention.

[41] It is understood by those skilled in the art that various changes or modifications may be made in the above embodiments of the present invention without departing from the spirit and scope of the invention. Thus, all the modifications and changes from the claims and their equivalents will be interpreted to be included within the present invention.

Claims

[1] A location-based service method using image data provided using a terminal equipped with a camera and location data including a location information of the terminal, comprising:
(a) a step of generating first image data with the terminal at a predetermined location and;
(b) a step of receiving the location data;
(c) a step of inserting the received location data into the first image data and generating second image data; and
(d) a step of displaying the image corresponding to the first image data and providing a service using the location data, when the second image data are selected.

[2] The location-based service method according to claim 1, further comprising:
(c1) a step of compressing and storing the second image data, after the step (c).

[3] The location-based service method according to claim 1 or 2, wherein the service using the location data in the step (d) is a map providing service, the method further comprising:
(d1) a step of selecting the map providing service;
(d2) a step of transmitting a service request signal and the location data to a map providing system; and
(d3) a step wherein the map providing system provides a map corresponding to the location data.

[4] The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

[5] The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

[6] The location-based service method according to claim 1 or 2, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:
(d1) a step of selecting the guiding service;
(d2) a step of transmitting the service request signal and the location data to a navigation system; and
(d3) a step wherein the navigation system provides the navigation data corresponding to the location data.

[7] The location-based service method according to claim 6, wherein the current

location data of the terminal are further transmitted to the navigation system in the step (d2).

[8] The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, the traffic information and the turnaround time.

[9] The location-based service method according to claim 1 or 2, wherein the location data are provided by the location data providing system.

[10] The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Cell Positioning System (CPS).

[11] The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Global Positioning System (GPS).

[12] The location-based service method according to claim 1 or 2, wherein the location data includes the information on the latitude and the longitude of the terminal or the base station.

[13] The location-based service method according to claim 1 or 2, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

[14] The location-based service method according to claim 13, wherein the digital camera includes a module which can receive the location data.

[15] A terminal which is equipped with a camera and can receive the location data, comprising:
a camera section generating the first image data at a predetermined location;
a location data processing section inserting the location data of the terminal into the first image data and generating the second image data; and
an image data storing section receiving and storing the second image data.

[16] The terminal according to claim 15, comprising the digital camera which can receive the location data.

[17] The terminal according to claim 15 or 16, further comprising a compression controller compressing the second image data and transmitting the same to the image data storing section.

[18] The terminal according to claim 15, wherein the location data are provided by the location data providing system using the base station or the satellite.

[19] The terminal according to claim 18, wherein the location data providing system provides the location data through the Cell Positioning System (CPS).

[20] The terminal according to claim 18, wherein the location data providing system provides the location data through the Global Positioning System (GPS).

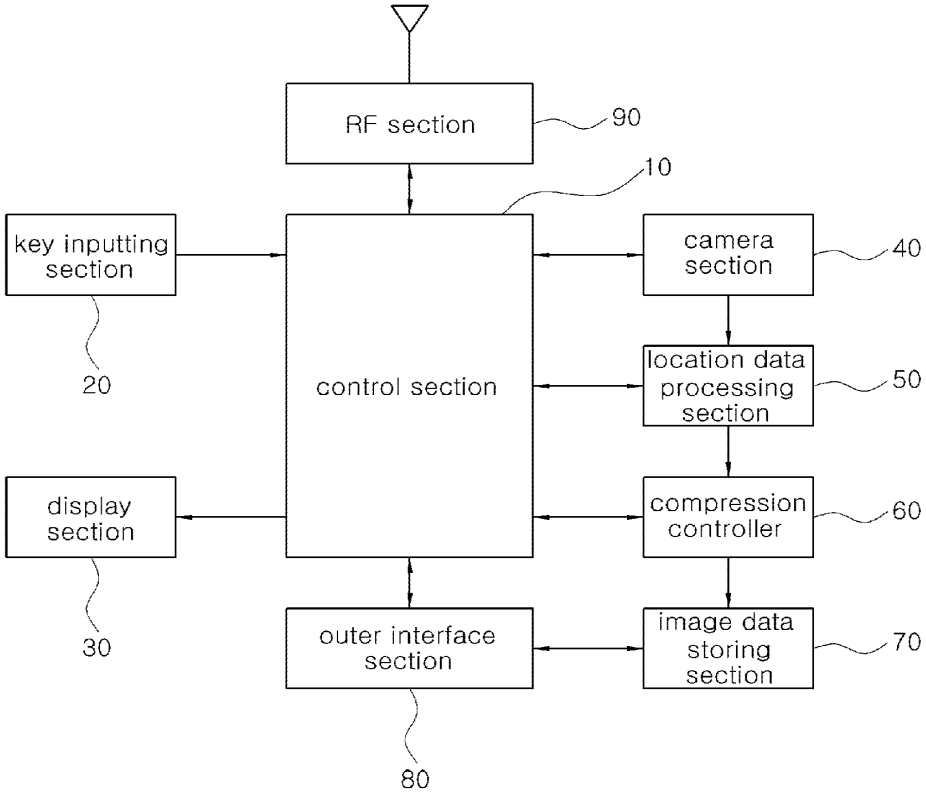
[21] The terminal according to claim 20, further comprising a GPS antenna receiving

the location data from the location data providing system.

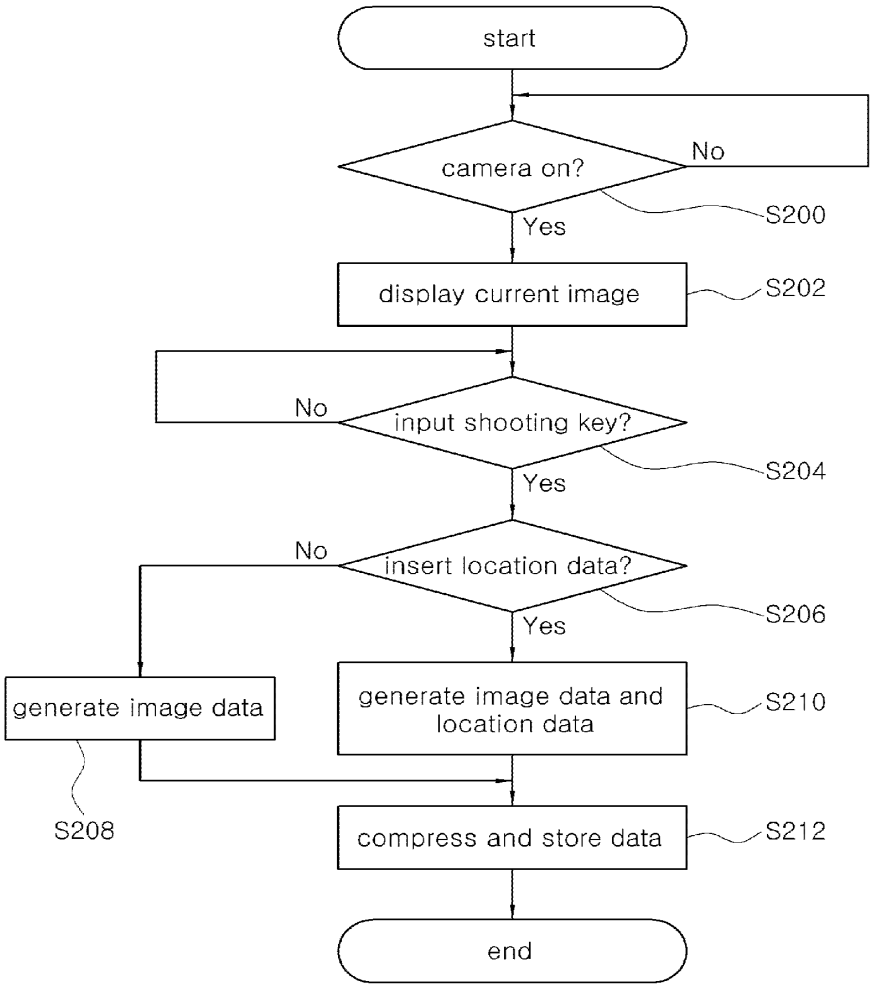
[22] The location-based service system comprising the terminal according to claim 15 or 16, comprising:
the terminal;
the location data providing system providing the location data of the terminal; and
a service system providing a service according to the user's selection based on the location data.

[23] The location-based service system according to claim 21, wherein the service system is a map providing system or a navigation system.

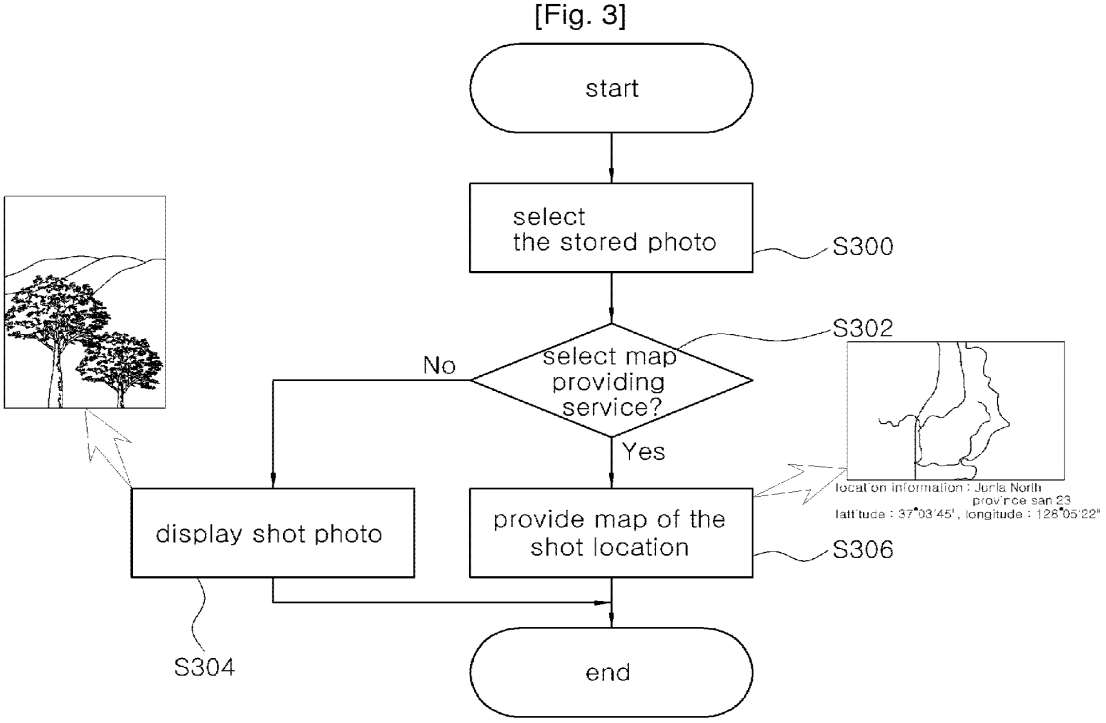
[Fig. 1]


RF section
90
10
key inputting section
20
control section
camera section
40
location data processing section
50
display section
30
compression controller
60
outer interface section
80
image data storing section
70

[Fig. 2]


start
camera on?
No
Yes
S200
display current image
S202
No
input shooting key?
Yes
S204
No
insert location data?
Yes
S206
generate image data
generate image data and location data
S210
S208
compress and store data
S212
end

[Fig. 3]


start
select the stored photo
S300
S302
select map providing service?
No
Yes
provide map of the shot location
S306
location information : Jeolla North province san 23
latitude : 37°03'45", longitude : 128°05'22"
display shot photo
S304
end

[Fig. 4]

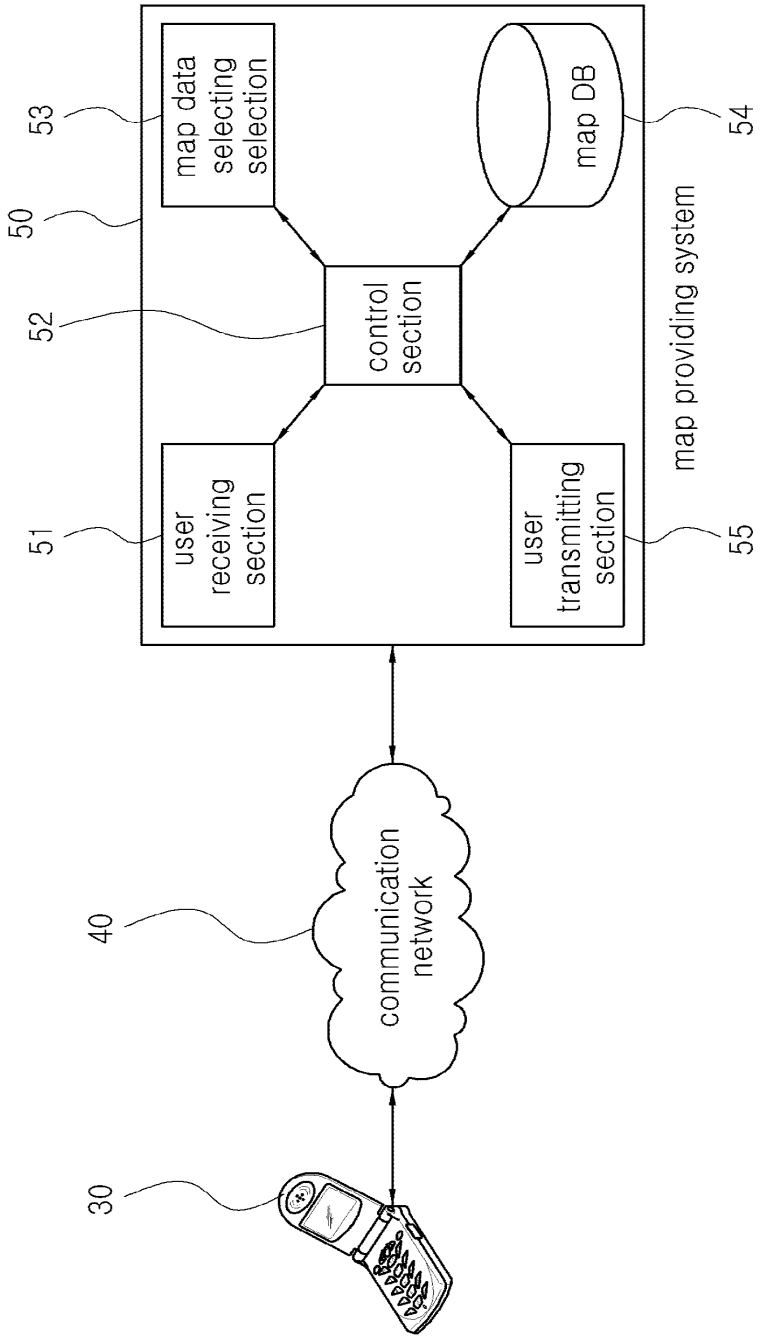
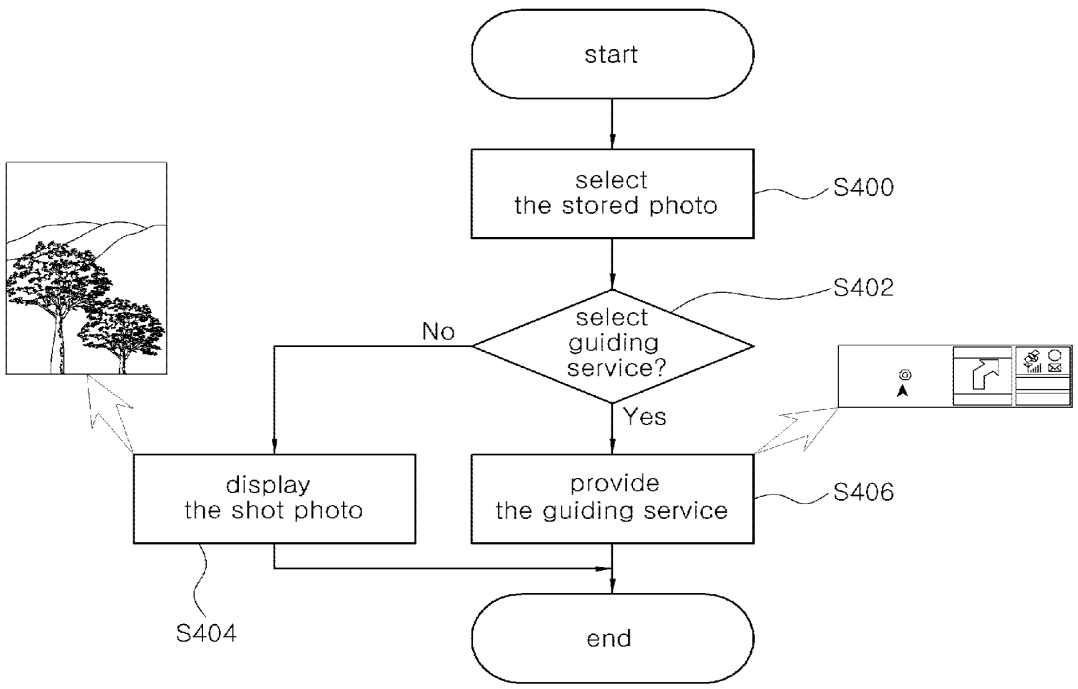
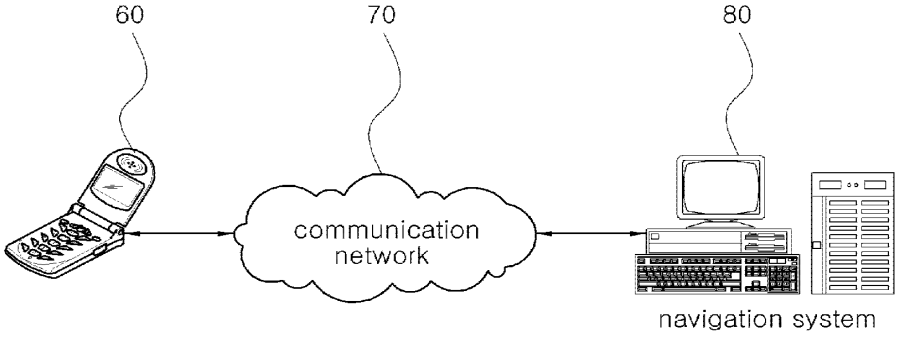


Exhibit 1004
Page 025 of 440

[Fig. 5]


start
select
the stored photo
S400
S402
select
guiding
service?
No
Yes
display
the shot photo
provide
the guiding service
S406
S404
end

[Fig. 6]


60
70
80
communication
network
navigation system

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2006/001444

A. CLASSIFICATION OF SUBJECT MATTER

H04B 7/26(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC8 H04B 7/26, G01S 5/14, H04N 1/21, 5/232

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
KOREAN PATENTS AND APPLICATIONS FOR INVENTIONS SINCE 1975
KOREAN UTILITY MODELS AND APPLICATIONS FOR UTILITY MODELS SINCE 1975

Electronic data base consulted during the internationl search (name of data base and, where practicable, search terms used)
eKIPASS, DELPHION, ESPACENET & Keywords : location, GPS, CPS, camera, image, map, navigation and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,437,797 B1 (Ota) 20 August 2002 * abstract, Col. 5 line 37 - line 60, figure 9 *	1-23
X	US2002-101619 A1 (Tsubaki et al.) 1 August 2002 * abstract, paragraphs [0138]-[0146], figure 11 *	1-23
A	JP1994-261244 A (TAMRON CO., LTD.) 16 September 1994 * abstract, paragraphs [0006]-[0009], figure 1 *	1-23

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
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"O" document referring to an oral disclosure, use, exhibition or other means
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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
25 JULY 2006 (25.07.2006)	**25 JULY 2006 (25.07.2006)**
Name and mailing address of the ISA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer KIM, Sang Woo Telephone No. 82-42-481-8324

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR2006/001444

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6,437,797 B1	20.08.2002	JP10233985A2	02.09.1998
US2002-101619 A1	01.08.2002	JP2002232761A2 JP2002271723A2	16.08.2002 20.09.2002
JP1994-261244 A	16.09.1994	NONE	

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Jin-Seung CHOI et al.	:	Confirmation No.: Not Yet Assigned
	:	
U.S. Patent Application No.: New	:	Group Art Unit: Not Yet Assigned
	:	
Filed: October 17, 2007	:	Examiner: Not Yet Assigned

For: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

PRELIMINARY AMENDMENT

Mail Stop PCT
Commissioner for Patents
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Alexandria, VA 22313-1450

Dear Sir:

Prior to prosecution on the merits, please amend the above-identified application as follows:

- Amendments to the Specification;
- Amendments to the Claims; and
- Remarks and arguments.

Amendments to the Specification:

Please insert the following heading and paragraph after the title of the application on page 1 of the specification:

--Cross Reference to Related Application

This application is the National Phase application of International Application No. **PCT/KR2006/001444**, filed **April 19, 2006**, which designates the United States and was published in English. This application, in its entirety, is incorporated herein by reference.--

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

Listing of the Claims

1. (Original) A location-based service method using image data provided using a terminal equipped with a camera and location data including a location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location and;

(b) a step of receiving the location data;

(c) a step of inserting the received location data into the first image data and generating second image data; and

(d) a step of displaying the image corresponding to the first image data and providing a service using the location data, when the second image data are selected.

2. (Original) The location-based service method according to claim 1, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. (Currently Amended) The location-based service method according to claim 1 ~~or 2~~, wherein the service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. (Original) The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

6. (Currently Amended) The location-based service method according to claim 1~~ or 2~~, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1) a step of selecting the guiding service;

(d2) a step of transmitting the service request signal and the location data to a navigation system; and

(d3) a step wherein the navigation system provides the navigation data corresponding to the location data.

7. (Original) The location-based service method according to claim 6, wherein the current location data of the terminal are further transmitted to the navigation system in the step (d2).

8. (Original) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, the traffic information and the turnaround time.

9. (Currently Amended) The location-based service method according to claim 1~~ or 2~~, wherein the location data are provided by the location data providing system.

10. (Original) The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Cell Positioning System (CPS).

11. (Original) The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Global Positioning System (GPS).

12. (Currently Amended) The location-based service method according to claim 1~~ or 2~~, wherein the location data includes the information on the latitude and the longitude of the terminal or the base station.

13. (Currently Amended) The location-based service method according to claim 1~~ or 2~~, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (Original) The location-based service method according to claim 13, wherein the digital camera includes a module which can receive the location data.

15. (Original) A terminal which is equipped with a camera and can receive the location data, comprising:

a camera section generating the first image data at a predetermined location;

a location data processing section inserting the location data of the terminal into the first image data and generating the second image data; and

an image data storing section receiving and storing the second image data.

16. (Original) The terminal according to claim 15, comprising the digital camera which can receive the location data.

17. (Currently Amended) The terminal according to claim 15~~ or 16~~, further comprising a compression controller compressing the second image data and transmitting the same to the image data storing section.

18. (Original) The terminal according to claim 15, wherein the location data are provided by the location data providing system using the base station or the satellite.

19. (Original) The terminal according to claim 18, wherein the location data providing system provides the location data through the Cell Positioning System (CPS).

20. (Original) The terminal according to claim 18, wherein the location data providing system provides the location data through the Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna receiving the location data from the location data providing system.

22. (Currently Amended) The location-based service system comprising the terminal according to claim 15~~ or 16~~, comprising:

the terminal;

the location data providing system providing the location data of the terminal; and

a service system providing a service according to the user's selection based on the location data.

23. (Original) The location-based service system according to claim 21, wherein the service system is a map providing system or a navigation system.

REMARKS

The specification has been amended to incorporate by reference the corresponding PCT applications; removes the multiple dependencies prior to examination; and provides an Abstract of the Disclosure on a clean sheet. No new matter has been added.

It is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP.

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Date: October 18, 2007

Attachment: Abstract of the Disclosure

ABSTRACT OF THE DISCLOSURE

The present invention relates to a location-based service method and system using location data included in image data, particularly to a method and a system of providing the location-based service with photos taken by a camera phone, using location information at the shooting time. The location-based service method according to the present invention, using the image data provided using a terminal equipped with a camera and the location data including the location information of the terminal, comprises the steps of shooting a target image with the terminal at a predetermined location and generating first image data; receiving the location data; including the received location data in the first image data and generating second image data; and displaying an image corresponding to the first image data and providing a service using the location data, if the second image data are selected.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA
First Named Inventor/Applicant Name:	Jin-Seung CHOI
Filer:	Yoon Ham/Kwang Yup Chae
Attorney Docket Number:	4900-0009
Filed as Large Entity	

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
National Stage Fee	1631	1	310	310
Natl Stage Search Fee - Report provided	1642	1	410	410
National Stage Exam - all other cases	1633	1	210	210
Pages:				
Claims:				
Claims in excess of 20	1615	3	50	150
Miscellaneous-Filing:				
Oath/decl > 30 months from priority date	1617	1	130	130

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1210**

Electronic Acknowledgement Receipt

EFS ID:	2338523
Application Number:	11911879
International Application Number:	PCT/KR06/01444
Confirmation Number:	2595
Title of Invention:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA
First Named Inventor/Applicant Name:	Jin-Seung CHOI
Customer Number:	22429
Filer:	Yoon Ham/Kwang Yup Chae
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	18-OCT-2007
Filing Date:	
Time Stamp:	15:14:48
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

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Payment was successfully received in RAM	$1210
RAM confirmation Number	448
Deposit Account	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)

1	Transmittal of New Application	71018_4900-0009_Transmittal_wo_Dec.pdf	37165 45c1ce1d0511fe878e66d5c8d3458c3be23dacda	no	2
Warnings:					
Information:					
2	Application Data Sheet	71018_4900-0009_Application_Datasheet.pdf	1651078 55264ec91801e4b543c8d005800f2c75cfc6b94f	no	7
Warnings:					
Information:					
3		71018_4900-0009_Intl_Publication.pdf	720754 993bbb1792597e4c4a397e27347a920ef28bff30	yes	19

Multipart Description/PDF files in .zip description

Document Description	Start	End
Abstract	1	1
Documents submitted with 371 Applications	2	2
Specification	3	9
Claims	10	12
Drawings-only black and white line drawings	13	17
Documents submitted with 371 Applications	18	19

Warnings:					
Information:					
4		71018_4900-0009_Preliminary_Amendment_Lessen_Fee_w_Abst.pdf	51111 caba131655f7b18b438f336d473b0deddfb45fa	yes	9

Multipart Description/PDF files in .zip description

Document Description	Start	End
Preliminary Amendment	1	1
Specification	2	2
Claims	3	7
Applicant Arguments/Remarks Made in an Amendment	8	8

	Specification		9	9	
Warnings:					
Information:					
5	Fee Worksheet (PTO-06)	fee-info.pdf	8656 06a518f8979420360c915ea664e4fcf7b68b094d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2468764		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER **4900-0009** U.S. APPLICATION NO. (if known, see 37 CFR 1.5)
INTERNATIONAL APPLICATION NO. **PCT/KR2006/001444**	INTERNATIONAL FILING DATE **April 19, 2006**	PRIORITY DATE CLAIMED **April 19, 2005**

TITLE OF INVENTION

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLICANT(S) FOR DO/EO/US

Jin-Seung CHOI; Jae-Chul LIM; Jae-Bum PARK; Hong-Keun JI; Jong-Ho KIM; Do-Wan KIM; Hyun-Jun OH; Dong-Won NA; and Won-Hee SULL

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) as indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☒ is transmitted hereto (required only if not communicated by the International Bureau).
   b. ☒ has been communicated by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. ☐ is attached hereto.
   b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   b. ☐ have been communicated by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendment has NOT expired.
   d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98; PTO-1449 Form and Foreign References
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☒ An Application Data Sheet under CFR 1.76
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13*ter*.2 and 37 CFR 1.821–1.825
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4)
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)
20. ☐ Other items or information:

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
	PCT/KR2006/00001444	**4900-0009**

The following fees are submitted:	CALCULATIONS	PTO USE ONLY
21. ☒ Basic national fee (37 CFR 1.492(a)) **$310.00**	**$ 310.00**	
22. ☒ Examination fee (37 CFR 1.492(c)) If the written opinion prepared by USI/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** All other situations **$210.00**	**$ 210.00**	
23. ☒ Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority ..... **$100.00** International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... **$410.00** All other situations **$510.00**	**$ 410.00**	
TOTAL OF 21, 22 and 23 =	**$ 930.00**	
☐ Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)). The fee is **$250** for each additional 50 sheets of paper or fraction thereof		

Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round **up** to a whole number)	RATE		
17- 100 =	0/50 =0	0	× $260.00	$	
Surcharge of **$130.00** for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				**$ 130.00**	

CLAIMS	NUMBER FILED		NUMBER EXTRA	RATE		
Total Claims	23	- 20 =	3	× $ 50.00	**$ 150.00**	
Independent Claims	2	- 3 =	0	× $210.00	$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ $370.00	$	
				TOTAL OF ABOVE CALCULATIONS =	**$ 1210.00**	
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.					$	
				SUBTOTAL =	**$ 1210.00**	
Processing fee of **$130.00** for furnishing the English translation later than the 30 months from the earliest claimed priority date (37 CFR 1.492(f)). +					**$ 0.00**	
				TOTAL NATIONAL FEE =	**$ 1210.00**	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +					**$ 0.00**	
				TOTAL FEES ENCLOSED =	**$ 1210.00**	
					Amount to be refunded:	
					Amount to be charged	

a. ☐ A check in the amount of $ _____.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 07-1337 in the amount of $ ___ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy of this sheet is enclosed.

d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. Kindly use the attorneys' address associated with the following Customer Number for future correspondence.

SEND ALL CORRESPONDENCE TO:

LOWE HAUPTMAN HAM & BERNER, LLP
1700 Diagonal Road, Suite 300
Alexandria, VA 22314
(703) 535-7360

Customer No. 22429
PATENT TRADEMARK OFFICE

/Yoon S. Ham/
SIGNATURE

Yoon S. HAM
NAME

45,307
REGISTRATION NUMBER

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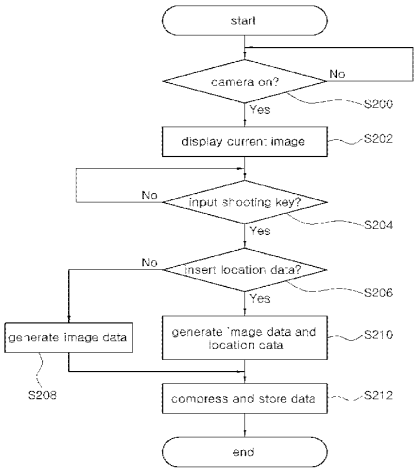
(74) Agent: **NAM, Sang-Sun**; KAL Bldg. 3rd Fl., 41-3 Seosomun-dong, Jung-gu, Seoul 100-813 (KR).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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[Continued on next page]

(54) Title: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA



(57) Abstract: The present invention relates to a location-based service method and system using location data included in image data, particularly to a method and a system of providing the location-based service with photos taken by a camera phone, using location information at the shooting time. The location-based service method according to the present invention, using the image data provided using a terminal equipped with a camera and the location data including the location information of the terminal, comprises the steps of shooting a target image with the terminal at a predetermined location and generating first image data; receiving the location data; including the received location data in the first image data and generating second image data; and displaying an image corresponding to the first image data and providing a service using the location data, if the second image data are selected.

WO 2006/112656 A1

ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:
— *with international search report*

Description

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

Technical Field

[1] The present invention relates to a method and a system of providing various services using photos taken by a camera phone, particularly to a method and a system of providing various services, including location information at the shooting time, with the photos taken by the camera phone.

Background Art

[2] Recently, as electronic parts become high sensitive, smaller and lighter, a mobile communication terminal is getting more downsized, and the function of the mobile communication terminal is getting various according to the needs of consumers. In addition to a calling function of the mobile communication terminal, a game function, an Internet retrieving function, an e-mail receiving and transmitting function, payment-settling function, etc. become generalized. In addition, the mobile communication terminal (camera phone), additionally having a camera function shooting a shape of an object with an equipped camera lens and an image transmitting function transmitting the shape of the object shot by the camera to computers or others' mobile communication terminals, becomes commercialized.

[3] However, since the shot photo has only image information, the conventional camera phone is limited to play a role of showing a user the image information or showing others only the shot photo by transmitting the image information to their mobile communication terminals or computers.

Disclosure of Invention

Technical Solution

[4] The present invention is provided to overcome the foregoing stated limit which the conventional camera phone contains. The object of the present invention is to provide a service of showing the user the shot location by map or guiding the user to the location when the user or others view the shot photo through the terminal, by including station information of the shot location or global positioning information of a GPS terminal in the image information at the time of shooting the photo with the camera phone.

[5] According to the present invention, by using a method of inserting and storing the location information at the shooting time on the photo shot by the terminal equipped with the camera, it is possible to provide various location-based services using the shot location information as well as view the corresponding photo.

[6] The location-based service using the location information included in photo in-

formation enables the user who views the photo to obtain the geographical location information by providing map information on the shot location, and enables the user to get to the location as quickly as possible when the location in the photo catches the fancy of the user by providing a service of guiding the user to the location in conjunction with a navigation system.

[7] The location-based service method, according to the present invention, using image data provided through a terminal equipped with a camera and location data including location information of the terminal, comprises the steps of: shooting a target image with the terminal at a predetermined location and generating first image data; receiving the location data; including the received location data in the first image data and generating second image data; and displaying an image corresponding to the first image data and providing a service using the location data, if the second image data are selected.

[8] Selectively, the terminal comprises a camera phone or a digital camera which can receive the location data.

[9] The terminal according to the present invention, which is equipped with the camera and can receive the location data, comprises a camera section shooting the image at the predetermined location and generating the first image data; a location data processing section including the location data of the terminal in the first image data and generating the second image data; and an image data storing section receiving and storing the second image data.

[10] The location-based service system including the terminal according to the present invention comprises a location data providing system providing the location data of the terminal and a service system providing a service based on the location data according to the user's selection.

Brief Description of the Drawings

[11] FIG. 1 is an outlined diagram showing a terminal having a photo shooting function and a location information processing function according to one preferred embodiment of the present invention.

[12] FIG. 2 is a flow chart showing a method of storing first image data and second image data including location data according to another preferred embodiment of the present invention.

[13] FIG. 3 is a flow chart showing a method of providing a map of the shot location to the user as a location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[14] FIG. 4 is an outlined diagram showing a system of providing a map of the shot

location to the user as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[15] FIG. 5 is a flow chart showing a method of providing a service of guiding the user to the shot location as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[16] FIG. 6 is a flow chart showing a system of providing a service of guiding the user to the shot location as the location-based service using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

Best Mode for Carrying Out the Invention

[17] The details and the improved matters of the present invention are disclosed in dependent claims.

[18] Hereunder, with reference to the attached drawings, a preferred embodiment of the present invention is explained in detail.

[19] FIG. 1 illustrates a constitution view of the terminal having the shooting function and the location information processing function according to one preferred embodiment of the present invention.

[20] Referring to FIG. 1, the terminal comprises a control section (10), a key inputting section (20), a display section (30), a camera section (40), a location data processing section (50), a compression controller (60), an image data storing section (70), an outer interface section (80) and a RF section (90).

[21] Selectively, the terminal can comprise a digital camera supported by a satellite receiving module.

[22] The control section (10) controls the receiving and transmitting of a radio frequency signal through the RF section (90), and controls the photo shooting and the output of the shot image data. The key inputting section (20) receives the user's instructions for the photo shooting and the output of the shot image data, and transmits the same to the control section (10). The display section (30) displays the contents related to the photo shooting which are transmitted from the control section (10) and informs the user of the same, and displays the image data transmitted from the control section (10).

[23] The camera section (40) shoots an object through a camera lens according to the control of the control section (10), converts the image of the shot object into a digital signal, captures consecutive digital signals as still pictures, and generates the first image data. Herein, the control section (10) controls the shooting function of the

camera section (40) according to the user's instructions through the key inputting section (20). Subsequently, the camera section (40) provides the image data to the location information processing section (50).

[24] The location information processing section (50) includes the location data received from a location information providing means (not illustrated) in the first image data generated in the camera section (40). The location information providing means can be a GPS means using a satellite or CPS means using a base station information.

[25] The means using the base station information, by means of CPS (Cell Positioning System), retrieves a particular cell in which a corresponding private mobile terminal is located and obtains the location information of the private mobile terminal. As noted, a person skilled in the art sectionalizes a service region into predetermined cells in order to provide a mobile communication service of a cellular or a PCS, and provides each cell with at least one base station. The private mobile terminal positioned in one cell performs a predetermined communication with the base station, thereby performing the processes of synchronization and paging, etc. with the base station. The location information of the private mobile terminal which is obtained by the paging with the base station is recorded in a home location registry (HLR), and, using the location information of the private mobile terminal recorded in HLR, performs a method of providing the service using the location information of the private mobile terminal according to the following present invention.

[26] The terminal using the GPS (Global Positioning System) means which utilize a satellite receives the location data of the current altitude, direction, etc. through a GPS antenna contained in the terminal from the satellite floating over the earth.

[27] The compression controller (60), according to the control of the control section (10), receives the first image data output from the location data processing section (50) and the second image data including the location data, compresses and stores the same in the image data storing section (70). The outer interface (80) is connected to the computer, etc. so that the image data stored in the image data storing section (70) can be displayed.

[28] FIG. 2 illustrates a flowchart of the method of storing the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[29] Referring to FIG. 2, the first thing is to check whether or not a camera shooting mode is set to "on" (S200). If the camera shooting mode is set to "on", the current image of the location which the user wants to shoot is displayed on the display section (S202). Subsequently, if the user input a photo shooting key (S204), the current image is shot, and a menu inquiring about whether to insert the location data is displayed (S206). In addition, selectively, the step (S206) can be performed after the first image

data are generated and stored. If the user does not want to insert the location data into the shot image data, the shot first image data are generated and transmitted to the compression controller, and the compression controller compresses and stores the first image data on the image data storing section (S208). If the user chooses to insert the location data, the location data processing section inserts the location data into the shot first image data and generates the second image data (S210). As in the step (S208), the compression controller compresses and stores the first image data and the second image data including the location data on the image data storing section (S212).

[30] The stored second image data can be transmitted to another mobile terminal through a wireless network, and the mobile terminal includes a PCS phone, a cellular phone, a PDA phone, etc. In addition, the data can be transmitted to a fixed terminal through an outer interface, and can be uploaded on a web page through an Internet network.

[31] FIGS. 3 and 4 illustrate a method and a system of providing the map of the location where the user shoots the photo in the terminal using the location data included in the second image data.

[32] Referring to FIG. 3, the first thing is for the user to select the stored photo in the terminal (S300). Herein, the stored photo includes the shot first image data and the location data of the terminal corresponding to the shot location. Subsequently, a menu inquiring about whether to select a map providing service is displayed (S302), and if the user does not want the map of the shot location, only the shot photo is displayed on the display section (S304). If the user selects the map providing service (S306), the map of the shot location is provided by a map data providing server and the map is displayed by a map providing section contained in the terminal. Selectively, after the step (S306), a step of selecting a type of the map, or a step of selecting a scale, etc. can be additionally included. In the map, the traffic information, the geographical information, etc. of the shot location can be included, and the latitude, the longitude, and the administrative district address of the shot location can be displayed.

[33] Referring to FIG. 4, the system of providing the map of the location where the user shoots the photo in the terminal using the location data included in the image data according to one preferred embodiment of the present invention, comprises a terminal (30) containing a map providing section; a communication network (40); and a map providing system (50) consisting of a user receiving section (51), a control section (52), a map data selecting section (53), a map DB (54) and a user transmitting section (55).

[34] The map DB (54) maintains a map corresponding to the location data which the terminal of the user provides. The control section (52) controls the function within the map providing system (50). The user receiving section (51) receives a request of the map data related to optional location data through the communication network (40)

from the terminal (30). In response to the input of the request, the map data selecting section (53) selects any one of the map data maintained in the map DB (54) according to a predetermined standard. The user transmitting section (53) transmits the selected map datum to the terminal (30).

[35] FIGS. 5 and 6 illustrate a method and a system of providing a guiding service in conjunction with a navigation system using the first image data and the second image data including the location data according to another preferred embodiment of the present invention.

[36] Referring to FIG. 5, the first thing is for the user to select the stored photo in the terminal (S400). Herein, the stored photo was stored as the shot first image data and the location data of the terminal corresponding to the shot location. Subsequently, a menu inquiring about whether to select the guiding service is displayed (S402), and if the user does not want the guiding service to the shot location, only the shot photo is displayed on the display section (S404). If the user selects the guiding service, the navigation data corresponding to the location data of the shot location are transmitted to the terminal by the navigation system, and the guiding service by means of a navigator of the terminal, including the shortest route to the shot location, the traffic condition, etc., is displayed on the display section (S406).

[37] Referring to FIG. 6, the system of providing the service of guiding the user to the shot location using the first image data and the location data of the terminal according to another preferred embodiment of the present invention comprises a terminal (60) equipped with a navigator, a communication network (70) and a navigation system (80).

[38] The terminal (60) transmits the location data (shot location) of the terminal to the communication network (70) on the service request, and the communication network transmits the location data including the location data of the current terminal to the navigation system (80). The navigation system (80) can comprise a map information section, a GIS (Geography Information System) section, a transmitting and receiving section, an operating section, a control section, etc. (not illustrated), and generates navigation data based on the location data of the terminal, transmits the same to the terminal (60) through the communication network (70). The navigator (not illustrated) of the terminal (60) receives and displays the navigation information on the display section.

[39] The guiding service can be provided to the user using the terminal at the time of moving a vehicle or walking.

[40] Although the present invention has been described in accordance with the preferred embodiments, the embodiments are merely illustrative, and are not limited to the scope of the present invention.

[41] It is understood by those skilled in the art that various changes or modifications may be made in the above embodiments of the present invention without departing from the spirit and scope of the invention. Thus, all the modifications and changes from the claims and their equivalents will be interpreted to be included within the present invention.

Claims

[1] A location-based service method using image data provided using a terminal equipped with a camera and location data including a location information of the terminal, comprising:
(a) a step of generating first image data with the terminal at a predetermined location and;
(b) a step of receiving the location data;
(c) a step of inserting the received location data into the first image data and generating second image data; and
(d) a step of displaying the image corresponding to the first image data and providing a service using the location data, when the second image data are selected.

[2] The location-based service method according to claim 1, further comprising:
(c1) a step of compressing and storing the second image data, after the step (c).

[3] The location-based service method according to claim 1 or 2, wherein the service using the location data in the step (d) is a map providing service, the method further comprising:
(d1) a step of selecting the map providing service;
(d2) a step of transmitting a service request signal and the location data to a map providing system; and
(d3) a step wherein the map providing system provides a map corresponding to the location data.

[4] The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

[5] The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

[6] The location-based service method according to claim 1 or 2, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:
(d1) a step of selecting the guiding service;
(d2) a step of transmitting the service request signal and the location data to a navigation system; and
(d3) a step wherein the navigation system provides the navigation data corresponding to the location data.

[7] The location-based service method according to claim 6, wherein the current

location data of the terminal are further transmitted to the navigation system in the step (d2).

[8] The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, the traffic information and the turnaround time.

[9] The location-based service method according to claim 1 or 2, wherein the location data are provided by the location data providing system.

[10] The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Cell Positioning System (CPS).

[11] The location-based service method according to claim 9, wherein the location data providing system provides the location data of the terminal using a Global Positioning System (GPS).

[12] The location-based service method according to claim 1 or 2, wherein the location data includes the information on the latitude and the longitude of the terminal or the base station.

[13] The location-based service method according to claim 1 or 2, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

[14] The location-based service method according to claim 13, wherein the digital camera includes a module which can receive the location data.

[15] A terminal which is equipped with a camera and can receive the location data, comprising:
a camera section generating the first image data at a predetermined location;
a location data processing section inserting the location data of the terminal into the first image data and generating the second image data; and
an image data storing section receiving and storing the second image data.

[16] The terminal according to claim 15, comprising the digital camera which can receive the location data.

[17] The terminal according to claim 15 or 16, further comprising a compression controller compressing the second image data and transmitting the same to the image data storing section.

[18] The terminal according to claim 15, wherein the location data are provided by the location data providing system using the base station or the satellite.

[19] The terminal according to claim 18, wherein the location data providing system provides the location data through the Cell Positioning System (CPS).

[20] The terminal according to claim 18, wherein the location data providing system provides the location data through the Global Positioning System (GPS).

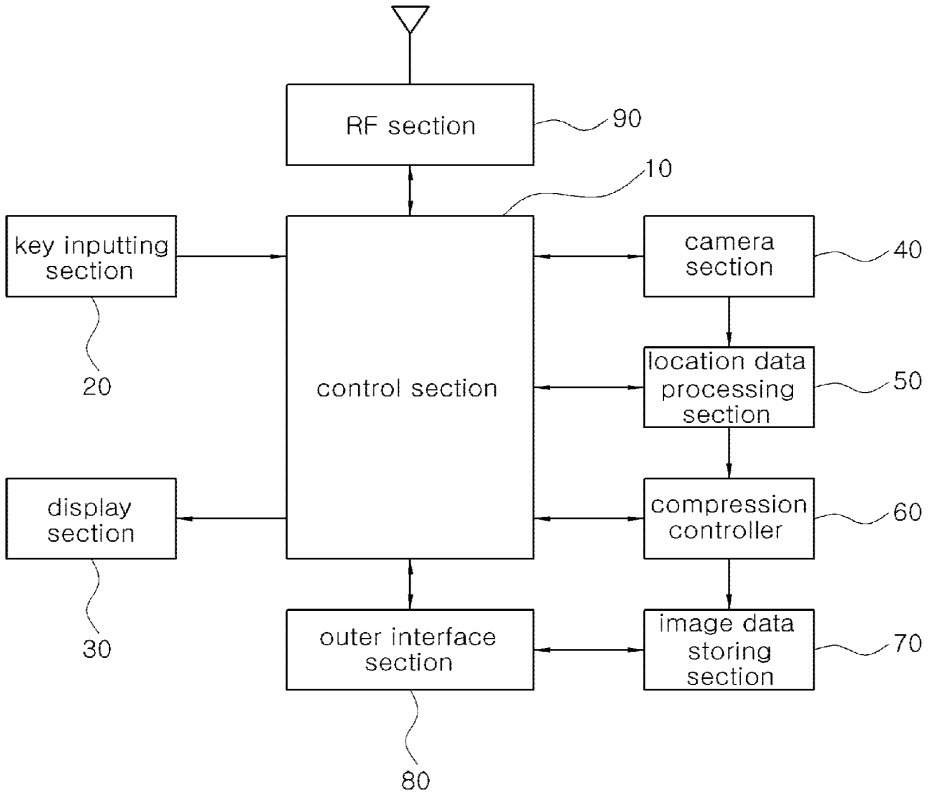
[21] The terminal according to claim 20, further comprising a GPS antenna receiving

the location data from the location data providing system.

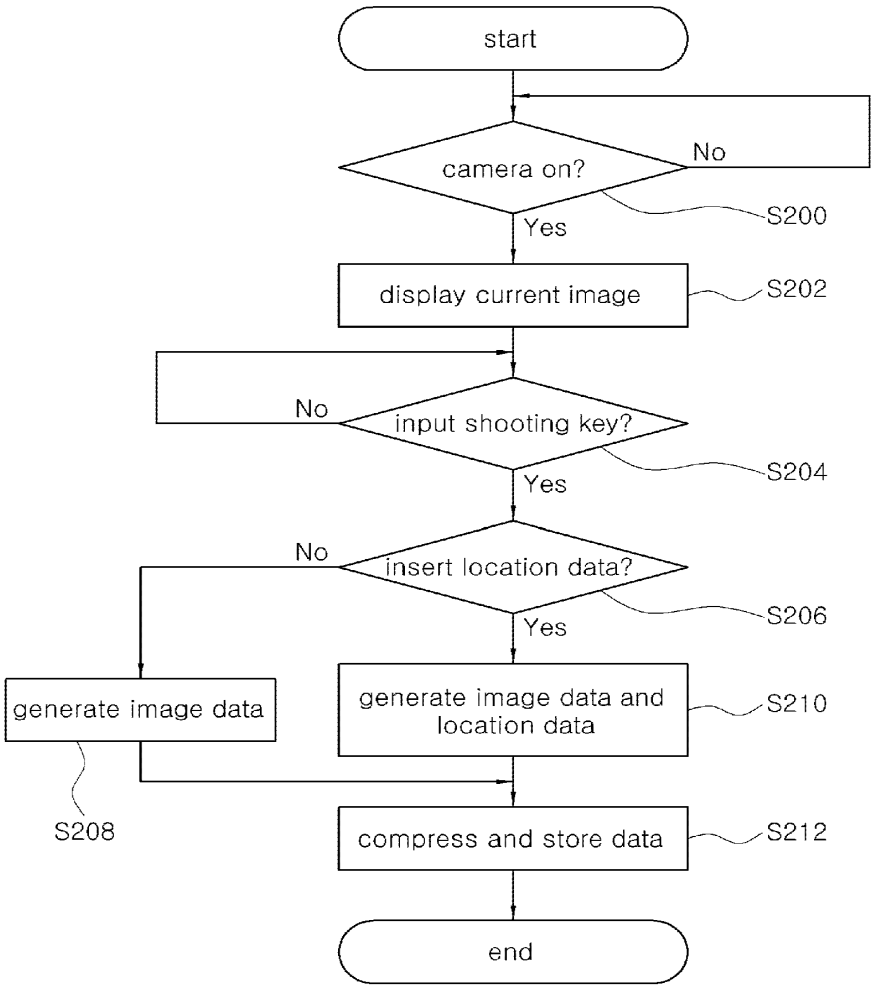
[22] The location-based service system comprising the terminal according to claim 15 or 16, comprising:
the terminal;
the location data providing system providing the location data of the terminal; and
a service system providing a service according to the user's selection based on the location data.

[23] The location-based service system according to claim 21, wherein the service system is a map providing system or a navigation system.

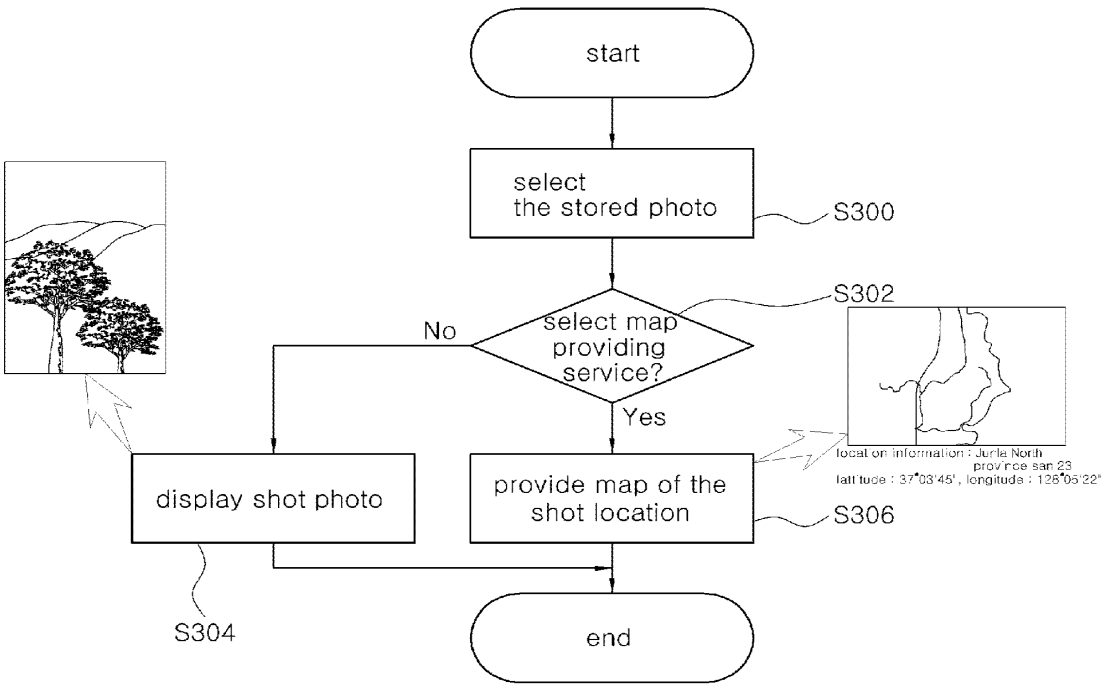
[Fig. 1]


RF section
90
10
key inputting section
20
control section
camera section
40
location data processing section
50
display section
30
compression controller
60
outer interface section
80
image data storing section
70

[Fig. 2]


start
camera on?
No
S200
Yes
display current image
S202
No
input shooting key?
S204
Yes
No
insert location data?
S206
Yes
generate image data
generate image data and location data
S210
S208
compress and store data
S212
end

[Fig. 3]


start
select the stored photo
S300
S302
select map providing service?
No
Yes
location information : Jurla North province san 23
latitude : 37°03'45', longitude : 128°05'22"
display shot photo
provide map of the shot location
S306
S304
end

[Fig. 4]

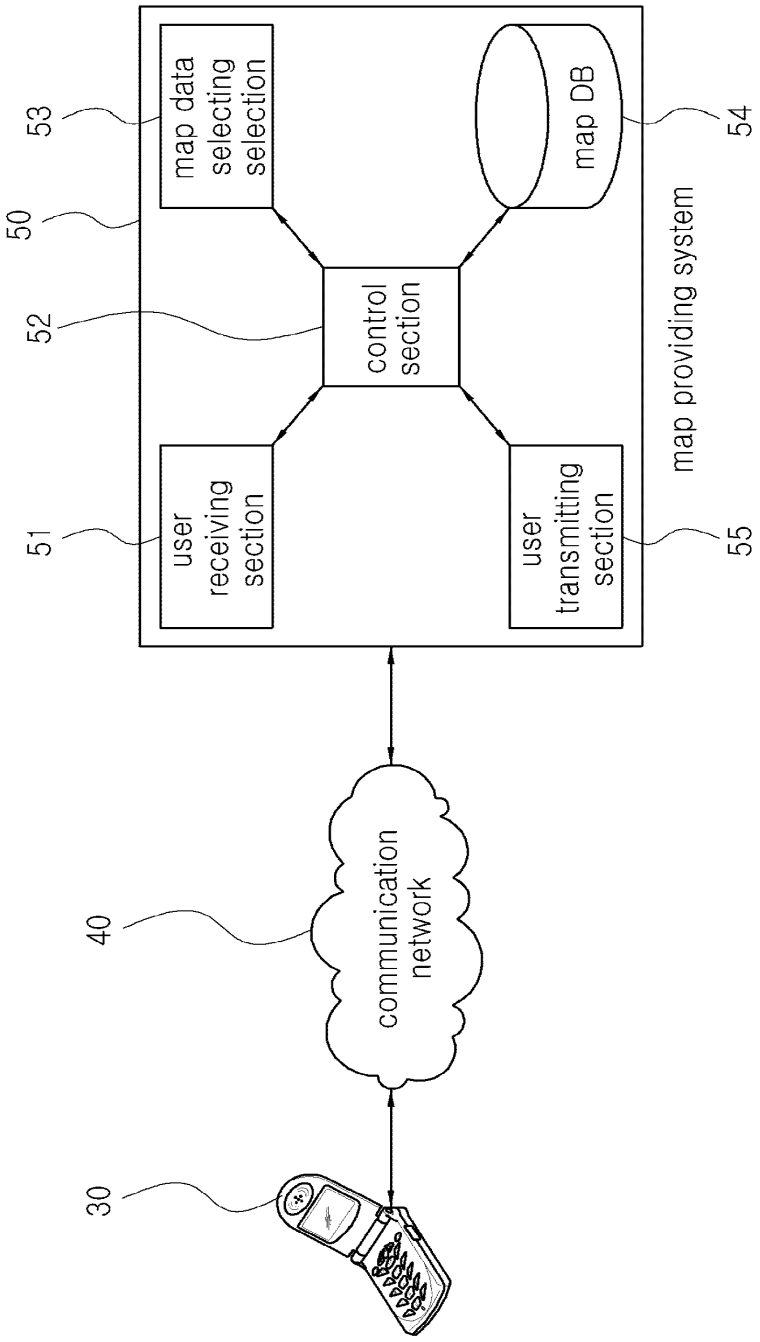
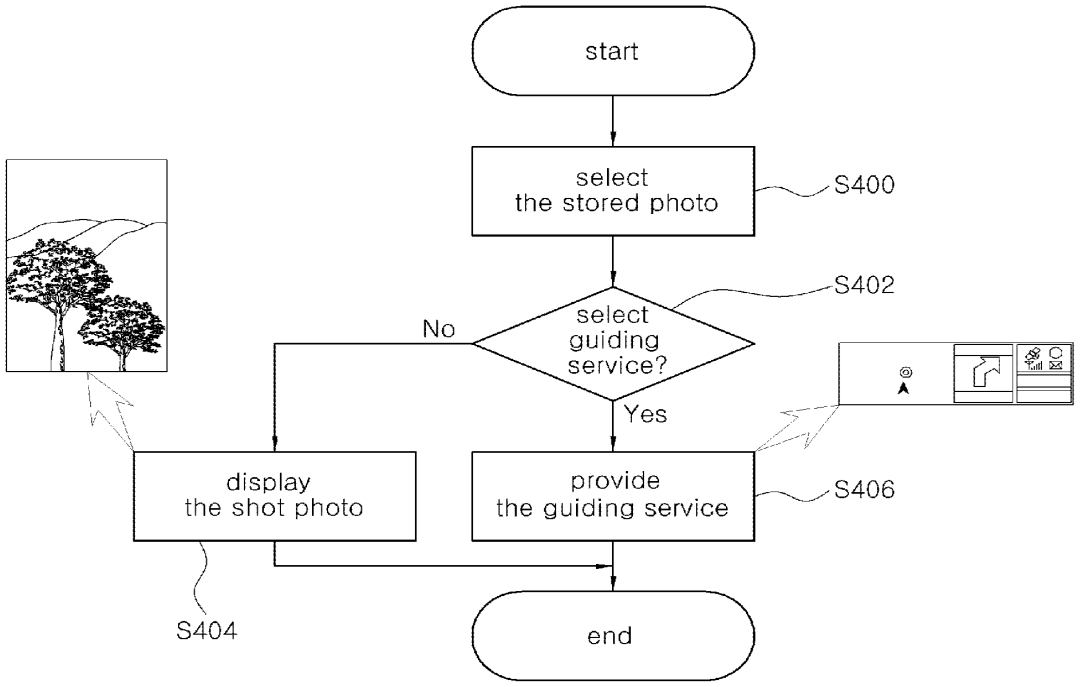
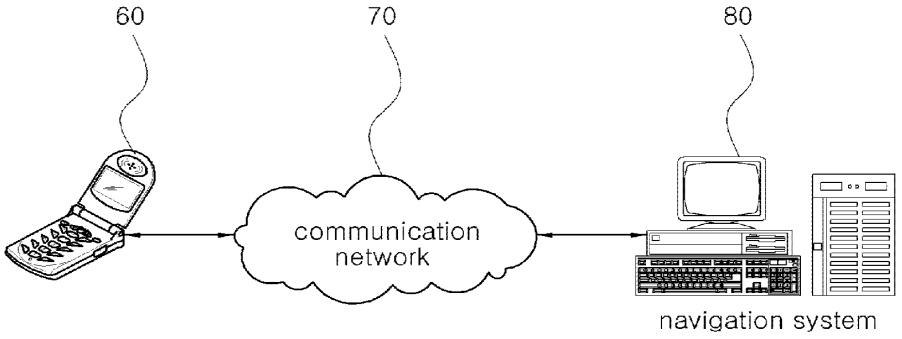


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[Fig. 5]


start
select
the stored photo
S400
S402
select
guiding
service?
No
Yes
display
the shot photo
provide
the guiding service
S406
S404
end

[Fig. 6]


60
70
80
communication
network
navigation system

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2006 년 05 월 03 일

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【수신처】 특허청장

【제출일자】 2005.04.19

【발명의 국문명칭】 이미지 데이터에 포함된 위치 데이터를 이용하는 위치 기반 서비스 방법 및 시스템

【발명의 영문명칭】 LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

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【취지】 특허법 제42조의 규정에 의한 출원, 특허법 제60조의 규정에 의한 출원심사를 청구합니다.

대리인 남상선 (인)

【수수료】

【기본출원료】	0 면	38,000 원
【가산출원료】	22 면	0 원
【우선권주장료】	0 건	0 원
【심사청구료】	23 항	845,000 원
【합계】	883,000 원	

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【요약서】

【요약】

본 발명은 이미지 데이터에 포함된 위치 데이터를 이용하는 위치 기반 서비스 방법 및 시스템에 관한 것이며, 더 상세하게는 카메라가 장착된 단말기로 찍은 사진에 촬영시의 위치정보를 이용하여 위치 기반 서비스를 제공하는 방법 및 시스템에 관한 것이다.

본 발명에 따른 카메라가 장착된 단말기를 이용하여 제공되는 이미지 데이터와 단말기의 위치 정보를 포함하는 위치 데이터를 이용하는 위치 기반 서비스 방법은 소정의 장소에서 촬영하고자 하는 이미지를 상기 단말기로 촬영하여 제 1 이미지 데이터를 생성하는 단계, 상기 위치 데이터를 수신하는 단계, 상기 제 1 이미지 데이터에 상기 수신된 위치 데이터를 포함하여 제 2 이미지 데이터를 생성하는 단계 및 상기 제 2 이미지 데이터가 선택되는 경우, 상기 제 1 이미지 데이터에 상응하는 이미지가 디스플레이되고 상기 위치 데이터를 이용하여 서비스가 제공되는 단계를 포함한다.

【대표도】

도 2

【색인어】

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【명세서】

【발명의 명칭】

이미지 데이터에 포함된 위치 데이터를 이용하는 위치 기반 서비스 방법 및 시스템{LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA}

【도면의 간단한 설명】

<1> 도 1 은 본 발명의 일 실시 예에 따른 사진 촬영기능 및 위치정보 처리 기능을 갖는 단말기의 개략도이다.

<2> 도 2 는 본 발명의 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 저장하는 방법의 흐름도이다.

<3> 도 3a 는 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 이용한 위치 기반 서비스로서 사용자에게 사진을 촬영한 장소의 지도를 제공하는 방법의 흐름도이다.

<4> 도 3b 는 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 이용한 위치 기반 서비스로서 사용자에게 사진을 촬영한 장소의 지도를 제공하는 시스템의 개략도이다.

<5> 도 4a 는 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 이용한 위치 기반 서비스로서 사용자에게 사진을 촬영한 장소로의 길 안내 서비스를 제공하는 방법의 흐름도이다.

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<6> 도 4b 는 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 이용한 위치 기반 서비스로서 사용자에게 사진을 촬영한 장소로의 길 안내 서비스를 제공하는 시스템의 개략도이다.

<7> <도면의 주요부분에 대한 부호의 설명>

<8> 10: 제어부 20: 키 입력부

<9> 30: 표시부 40: 카메라부

<10> 50: 위치 데이터 처리부 60: 압축 제어기

<11> 70: 이미지 데이터 저장부

【발명의 상세한 설명】

【발명의 목적】

【발명이 속하는 기술분야 및 그 분야의 종래기술】

<12> 본 발명은 카메라폰으로 찍은 사진을 이용해서 다양한 서비스를 제공하는 방법 및 시스템에 관한 것이며, 더 상세하게는 카메라폰으로 찍은 사진에 촬영시의 위치정보를 포함하여 다양한 서비스를 제공하는 방법 및 시스템에 관한 것이다.

<13> 최근 이동통신단말기는 전자부품이 고감도, 소형화 및 경량화되어 감에 따라 크기가 점차 소형화되고 있으며, 소비자의 욕구에 따라 이동통신단말기의 기능이 다양해지고 있다. 이에 이동통신단말기의 통화기능 이외에 게임기능, 인터넷검색기능, 전자메일(e-mail) 수신 및 발신기능, 대금결제기능 등이 일반화되고 있으며, 그리고 카메라렌즈를 설치하여 이동통신단말기로 사물의 형상을 찍는

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카메라기능과, 카메라로 찍은 사물의 형상을 컴퓨터나 다른 사람의 이동통신단말기로 전송하는 영상전송기능이 추가된 이동통신단말기(카메라폰)가 상용화되고 있다.

<14> 그러나 종래의 카메라폰은 촬영한 사진이 이미지 정보만을 가지고 있어서 그러한 이미지 정보를 사용자 본인이 사진으로 보거나, 또는 다른 사람의 이동통신단말기 또는 컴퓨터로 전송하여 촬영한 사진만을 다른 사용자에게 보여주는 역할을 하는데 그치고 있다.

【발명이 이루고자 하는 기술적 과제】

<15> 본 발명은 전술한 종래의 카메라폰이 가지는 한계점을 극복하기 위하여 도출된 것으로, 카메라폰으로 사진 촬영시, 촬영장소의 기지국 정보 또는 GPS 단말기의 경우 위성 위치 정보를 이미지 정보에 포함시켜, 본인이나 다른 사용자가 단말기를 통해서 상기 촬영한 사진을 볼 때, 사용자에게 촬영 장소를 지도로 보여주거나 또는 촬영 장소로 길안내 서비스를 제공하는 것을 목적으로 한다.

【발명의 구성】

<16> 본 발명에 따른 카메라가 장착된 단말기를 이용하여 제공되는 이미지 데이터와 단말기의 위치 정보를 포함하는 위치 데이터를 이용하는 위치 기반 서비스 방법은 소정의 장소에서 촬영하고자 하는 이미지를 상기 단말기로 촬영하여 제 1 이미지 데이터를 생성하는 단계, 상기 위치 데이터를 수신하는 단계, 상기 제 1 이미지 데이터에 상기 수신된 위치 데이터를 포함하여 제 2 이미지 데이터를 생성하는 단계 및 상기 제 2 이미지 데이터가 선택되는 경우, 상기 제 1 이미지 데이터에 상응하는 이미지가 디스플레이되고 상기 위치 데이터를 이용하여 서비스가 제공되는 단

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계를 포함한다.

<17> 선택적으로, 상기 단말기는 카메라폰 또는 위치 데이터를 수신할 수 있는 디지털 카메라를 포함한다.

<18> 본 발명에 따른 단말기는 카메라를 구비하며, 위치 데이터를 수신할 수 있는 단말기로서, 소정의 장소에서 이미지를 촬영하여 제 1 이미지 데이터를 생성하는 카메라부, 상기 제 1 이미지 데이터에 단말기의 위치 데이터를 포함하여 제 2 이미지 데이터를 생성하는 위치 데이터 처리부, 상기 제 2 이미지 데이터를 입력받아 저장하는 이미지 데이터 저장부를 포함한다.

<19> 본 발명에 따른 상기 단말기를 포함한 위치 기반 서비스 시스템은 상기 단말기의 위치 데이터를 제공하는 위치 데이터 제공시스템 및 상기 위치 데이터를 기초로 사용자의 선택에 따라 서비스를 제공하는 서비스 시스템을 포함한다.

<20> 본 발명의 세부 및 개선 사항은 종속항에 개시된다.

<21> 이하, 첨부한 도면을 참조하여 본 발명의 바람직한 실시 예가 상세히 설명된다.

<22> 도 1 은 본 발명의 일 실시 예에 따른 사진 촬영기능 및 위치정보 처리 기능을 갖는 단말기의 구성도를 도시한다.

<23> 도 1 을 참조하면, 상기 단말기는 제어부(10), 키 입력부(20), 표시부(30), 카메라부(40), 위치 데이터 처리부(50), 압축제어기(60), 이미지 데이터 저장부(70), 외부 인터페이스부(80) 및 RF부(90)를 포함한다.

<24> 선택적으로, 상기 단말기는 위성 수신 모듈이 지원되는 디지털 카메라를 포

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함할 수 있다.

<25> 제어부(10)는 RF부(90)를 통한 무선주파수신호의 송수신을 제어하고, 사진촬영 및 촬영된 이미지 데이터의 출력을 제어한다. 키 입력부(20)는 사진촬영 및 촬영된 이미지 데이터의 출력을 위한 사용자 명령을 입력받아 제어부(10)에 전달한다. 표시부(30)는 제어부(10)로부터 전달되는 사진 촬영에 관련된 내용을 디스플레이하여 사용자에게 알려주고, 제어부(10)로부터 전달되는 이미지 데이터를 디스플레이한다.

<26> 카메라 부(40)는 제어부(10)의 제어에 따라 카메라 렌즈를 통해 대상물을 촬영하여 촬영한 대상물에 대한 영상을 디지털신호로 변환 시키고 연속되는 디지털신호를 정지영상으로 캡처(capture)하여 제 1 이미지 데이터를 생성한다. 여기서, 제어부(10)는 키 입력 부(20)를 통한 사용자의 지시에 따라 카메라 부(40)의 촬영기능을 제어한다. 이어, 상기 카메라 부(40)는 상기 이미지 데이터를 위치 정보 처리부(50)에 제공한다.

<27> 위치 정보 처리부(50)는 위치 정보 제공수단(도시되지 않음)으로부터 수신한 위치 데이터를 상기 카메라 부(40)에서 생성한 제 1 이미지 데이터에 포함한다. 위치 정보 제공수단은 기지국 정보를 이용하거나 또는 위성을 이용하는 GPS 수단일 수 있다.

<28> 상기 기지국 정보를 이용하는 수단은 CPS(Cell Positioning System)을 이용하여, 해당 개인 휴대 단말기가 위치하고 있는 특정 셀을 검색하여 상기 개인 휴대 단말기의 위치 정보를 얻는 것이다. 당업자라면 주지하는 바와 같이, 셀룰러 또는

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PCS 등의 이동 통신 서비스를 제공하기 위해서는 서비스 영역을 소정의 셀(cell)로 구분하고, 각 셀에 하나 이상의 기지국(base station)을 구비한다. 하나의 셀에 위치하는 개인 휴대 단말기는 기지국과 소정의 통신을 수행함으로써, 기지국과의 동기화(synchronization) 및 페이징(paging) 등의 프로세스를 수행한다. 기지국과의 페이징으로 얻어진 개인 휴대 단말기의 위치 정보는 홈 로케이션 레지스트리(HLR)에 기록되고, HLR에 기록된 개인 휴대 단말기의 위치 정보를 이용하여 후술하는 본 발명에 따른 개인 휴대 단말기의 위치 정보를 이용한 서비스 제공 방법을 수행한다.

<29> 위성을 이용한 GPS(Global Positioning System)수단을 사용하는 단말기는 지구 위에 떠 있는 위성으로부터 단말기에 구비된 GPS 안테나를 통해서 현재의 고도, 방위 등의 위치 데이터를 전송받는다.

<30> 압축 제어기는(60) 제어부(10)의 제어에 따라 위치 데이터 처리부(50)로부터 출력되는 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 입력받아 이를 압축하여 이미지 데이터 저장부(70)에 저장시킨다. 외부 인터페이스부(80)는 이미지 데이터 저장부(70)에 저장된 이미지 데이터를 현상하기 위하여 컴퓨터 등에 접속된다.

<31> 도 2는 본 발명의 다른 실시 예에 따른 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 저장하는 방법의 흐름도를 도시한다.

<32> 도 2를 참조하면, 먼저 카메라 촬영모드가 "온" 설정되어 있는지 여부를 체크한다(S200). 카메라 촬영모드로 설정되어 있는 경우, 사용자가 촬영하고자 하는

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장소의 현재 이미지가 표시부에 디스플레이된다(S 202). 이어, 사용자가 사진 촬영 키를 입력하면(S 204), 현재 이미지를 촬영하고, 위치 데이터 삽입 여부를 묻는 메뉴가 표시된다(S 206). 또한, 선택적으로 단계(S 206)는 제 1 이미지 데이터를 생성하여 저장한 후에 이루어질 수도 있다. 사용자가 촬영한 이미지 데이터에 위치 데이터 삽입을 원하지 않으면 압축 제어기로 촬영한 제 1 이미지 데이터를 생성하여 전달하고, 상기 압축 제어기가 제 1 이미지 데이터를 압축하여 이미지 데이터 저장부에 저장하게 된다(S 208). 사용자가 위치 데이터 삽입을 선택하면 위치 데이터 처리부에서 촬영한 제 1 이미지 데이터에 위치 데이터를 삽입하여 제 2 이미지 데이터를 생성한다(S 210). 단계(S 208)와 같이 압축 제어기가 제 1 이미지 데이터와 위치 데이터를 포함하는 제 2 이미지 데이터를 압축하여 이미지 데이터 저장부에 저장한다(S 212).

<33> 상기 저장된 제 2 이미지 데이터를 무선망을 통해서 다른 이동 단말기에 전송할 수도 있는데, 상기 이동 단말기는 PCS폰, 셀룰러 폰, PDA등을 포함한다. 또한, 외부 인터페이스를 통하여 고정 단말에 전송할 수 있으며, 인터넷 망을 통해서 웹 페이지 상에 업로드할 수도 있다.

<34> 도 3a 및 3b는 제 2 이미지 데이터에 포함된 위치 데이터를 이용하여 단말기에서 사용자가 사진을 촬영한 장소의 지도를 제공하는 방법 및 시스템을 도시한다.

<35> 도 3a를 참조하면, 먼저 사용자가 단말기에서 저장된 사진을 선택한다(S300). 여기서 저장된 사진은 촬영한 제 1 이미지 데이터 및 상기 촬영 장소에 상응하는 단말기의 위치 데이터를 포함한다. 이어 지도 제공서비스 선택 여부를

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묻는 메뉴가 나타나고(S 302), 사용자가 촬영 장소의 지도를 원하지 않을 경우, 촬영한 사진만이 표시부에 도시된다(S 304). 사용자가 지도 제공서비스를 선택할 경우(S 306), 지도 데이터 제공 서버에 의해 촬영 장소의 지도가 제공되어 단말기에 내장된 지도 제공부에 의해 지도가 디스플레이된다. 선택적으로, 상기 단계(S 306) 다음에 지도의 종류를 선택하는 단계, 또는 축적 등을 선택하는 단계가 추가로 포함될 수 있다. 상기 지도에는 사진 촬영 장소의 교통 정보 또는 지리 정보 등이 포함될 수 있으며, 촬영 장소의 위도와 경도, 및 행정 구역 상의 주소가 디스플레이될 수도 있다.

<36> 도 3b를 참조하면, 본 발명의 일 실시 예에 따른 이미지 데이터에 포함된 위치 데이터를 이용하여 단말기에서 사용자가 사진을 촬영한 장소의 지도를 제공하는 시스템은 지도 제공부가 내장된 단말기(30), 통신망(40), 및 사용자 수신부(51), 제어부(52), 지도 데이터 선택부(53), 지도DB(54) 및 사용자 송신부(55)로 구성된 지도 제공 시스템(50)을 포함한다.

<37> 지도DB(54)는 사용자 단말이 제공하는 위치 데이터에 상응하는 지도를 유지한다. 제어부(52)는 지도 제공 시스템(50) 내의 기능을 제어한다. 사용자 수신부(51)는 단말기(30)로부터 통신망(40)을 통해 임의의 위치 데이터와 연관된 지도 데이터의 요청을 입력받는다. 상기 요청의 입력에 응답하여 지도 선택부(53)는 소정의 기준에 따라 지도DB(54)에 유지되어 있는 지도 중 어느 하나의 지도 데이터를 선택한다. 사용자 송신부(53)는 상기 선택된 지도 데이터를 단말기(30)로 전송한다.

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<38> 도 4a 및 4b에는 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터 및 위치 데이터를 포함하는 제 2 이미지 데이터를 이용하여 네비게이션 시스템과 연계한 길 안내 서비스를 제공하기 위한 방법 및 시스템이 도시된다.

<39> 도 4a를 참조하면, 먼저 사용자가 단말기에서 저장된 사진을 선택한다(S400). 여기서 저장된 사진은 촬영한 제 1 이미지 데이터 및 촬영 장소에 상응하는 단말기의 위치 데이터로 저장되었다. 이어 길 안내 서비스 선택 여부를 묻는 메뉴가 나타나고(S 402), 사용자가 촬영 장소로의 길 안내 서비스를 원하지 않을 경우, 촬영한 사진만이 표시부에 도시된다(S 304). 사용자가 길 안내 서비스를 선택할 경우, 네비게이션 시스템에 의해 촬영 장소의 위치 데이터에 상응하는 네비게이션 데이터를 단말기에 전송하고, 단말기의 네비게이터에 의해 사진 촬영 장소까지의 최단 경로, 교통 상황 등을 포함한 길 안내 서비스가 표시부에 디스플레이된다(S 406).

<40> 도 4b를 참조하면, 본 발명의 또 다른 실시 예에 따른 제 1 이미지 데이터 및 단말기의 위치 데이터를 이용하여 사용자에게 촬영한 장소로의 길 안내 서비스를 제공하는 시스템은 네비게이터를 구비한 단말기(60), 통신망(70) 및 네비게이션 시스템(80)을 포함한다.

<41> 단말기(60)는 서비스 요청과 함께 단말기의 위치 데이터(사진 촬영 장소)를 통신망(70)에 전송하고, 통신망에서 현재 단말기의 위치 데이터를 포함한 위치 데이터를 네비게이션 시스템(80)에 전송한다. 네비게이션 시스템(80)은 지도 정보부, GIS(Geography Information System)부, 송수신부, 연산부, 제어부 등을 포

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함할 수 있으며(도시되지 않음), 상기 단말기로부터의 위치 데이터에 기초하여 네비게이션 데이터를 생성하여 통신망(70)을 통해서 단말기(60)로 전송한다. 상기 단말기(60)의 네비게이터(도시되지 않음)가 상기 네비게이션 정보를 수신하여 표시부에 디스플레이한다.

<42> 상기 길 안내 서비스는 차량 이동, 또는 보행시 단말기를 이용하는 사용자에게 제공할 수 있다.

<43> 이상, 본 발명의 바람직한 실시 예를 바탕으로 설명되었지만, 상기 설명은 단순한 예시를 목적으로 하며, 본 발명의 범위를 한정하는 것은 아니다.

<44> 당업자들은 본 발명을 응용할 수 있는 많은 변형예 및 변경들을 생각할 수 있고, 또한 상기 변형 및 변경들은 본 발명의 개념을 이용하고 따라서 본 발명의 보호범위 내에 있다.

【발명의 효과】

<45> 본 발명에 따른, 카메라가 장착된 단말기로 촬영한 사진에 촬영시의 위치 정보를 삽입하여 저장하는 방법을 사용함으로써 해당 사진을 볼 수 있는 것은 물론, 해당 촬영지의 위치 정보를 이용하여 다양한 위치기반 서비스를 제공할 수 있다.

<46> 사진 정보에 포함된 위치 정보를 이용하는 위치기반 서비스는 사진 촬영장소의 지도 정보를 제공함으로써 사진을 보는 사용자에게 촬영 장소에 대한 지리적인 위치 정보를 얻을 수 있게 하고, 네비게이션 시스템과 연계한 촬영 장소로의 길 안내 서비스를 제공함으로써 사용자가 사진 속의 장소를 보고 마음에 들었을 때, 그 장소로 가깝게, 그리고 빠르게 찾아갈 수 있게 한다.

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【특허청구범위】

【청구항 1】

카메라가 장착된 단말기를 이용하여 제공되는 이미지 데이터와 단말기의 위치 정보를 포함하는 위치 데이터를 이용하는 위치 기반 서비스 방법으로서,

(a) 소정의 장소에서 촬영하고자 하는 이미지를 상기 단말기로 촬영하여 제 1 이미지 데이터를 생성하는 단계;

(b) 상기 위치 데이터를 수신하는 단계;

(c) 상기 제 1 이미지 데이터에 상기 수신된 위치 데이터를 포함하여 제 2 이미지 데이터를 생성하는 단계; 및

(d) 상기 제 2 이미지 데이터가 선택되는 경우, 상기 제 1 이미지 데이터에 상응하는 이미지가 디스플레이되고 상기 위치 데이터를 이용하여 서비스가 제공되는 단계를 포함하는 위치 기반 서비스 방법.

【청구항 2】

제 1항에 있어서, 상기 (c) 단계 다음에,

(c 1) 상기 제 2 이미지 데이터를 압축하여 저장하는 단계를 더 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 3】

제 1항 또는 제 2항에 있어서,

상기 (d) 단계에서, 상기 위치 데이터를 이용하는 서비스는 지도를 제공하는

서비스로서,

(d 1) 상기 지도 제공서비스를 선택하는 단계;

(d 2) 서비스 요청 신호와 상기 위치 데이터를 지도 제공 시스템에 전송하는 단계; 및

(d 3) 상기 지도 제공 시스템이 상기 위치 데이터에 상응하는 지도를 제공하는 단계를 더 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 4】

제 3항에 있어서,

상기 지도는 상기 위치 데이터의 지리적 정보, 교통 정보, 행정 구역 상의 정보 및 위도와 경도를 포함하는 정보 중에서 적어도 하나를 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 5】

제 3항에 있어서,

상기 (d 1) 단계 다음에, 상기 지도의 종류를 선택하는 단계를 더 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 6】

제 1항 또는 제 2항에 있어서,

상기 (d) 단계에서, 상기 서비스는 상기 위치 데이터를 이용하여 길 안내를 제공하는 서비스로서,

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(d 1) 상기 길 안내 제공서비스를 선택하는 단계;

(d 2) 서비스 요청 신호와 상기 위치 데이터를 네비게이션 시스템에 전송하는 단계; 및

(d 3) 상기 네비게이션 시스템이 상기 위치 데이터에 상응하는 네비게이션 데이터를 제공하는 단계를 더 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 7】

제 6항에 있어서,

상기 (d 2) 단계에서, 단말기의 현재 위치 데이터를 더 포함하여 전송하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 8】

제 6항에 있어서,

상기 네비게이션 데이터는 상기 위치 데이터에 상응하는 최단 거리, 교통 정보 및 소요 시간을 포함하는 정보 중에서 적어도 하나를 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 9】

제 1항 또는 제 2항에 있어서,

상기 위치 데이터는 위치 데이터 제공시스템이 제공하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 10】

제 9항에 있어서,

상기 위치 데이터 제공시스템은 셀 위치 확인 시스템(CPS)을 이용하여 상기 단말기의 위치 데이터를 제공하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 11】

제 9항에 있어서,

상기 위치 데이터 제공시스템은 위성 위치 확인 시스템(GPS)을 이용하여 상기 단말기의 위치 데이터를 제공하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 12】

제 1항 또는 제 2항에 있어서,

상기 위치 데이터는 상기 단말기의 위도와 경도 또는 기지국 정보를 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 13】

제 1항 또는 제 2항에 있어서,

상기 카메라가 장착된 단말기는 카메라폰 또는 디지털 카메라를 포함하는 것을 특징으로 하는 위치 기반 서비스 방법.

【청구항 14】

제 13항에 있어서,

상기 디지털 카메라는 위치 데이터를 수신할 수 있는 모듈을 포함하는 것을

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특징으로 하는 위치 기반 서비스 방법.

【청구항 15】

카메라를 구비하며, 위치 데이터를 수신할 수 있는 단말기로서,

소정의 장소에서 이미지를 촬영하여 제 1 이미지 데이터를 생성하는 카메라부;

상기 제 1 이미지 데이터에 단말기의 위치 데이터를 포함하여 제 2 이미지 데이터를 생성하는 위치 데이터 처리부;

상기 제 2 이미지 데이터를 입력받아 저장하는 이미지 데이터 저장부를 포함하는 단말기.

【청구항 16】

제 15항에 있어서,

상기 단말기는 위치 데이터를 수신할 수 있는 디지털 카메라를 포함하는 것을 특징으로 하는 단말기.

【청구항 17】

제 15항 또는 제 16항에 있어서,

상기 제 2 이미지 데이터를 압축하여 상기 이미지 데이터 저장부에 전달하는 압축 제어기를 더 포함하는 것을 특징으로 하는 단말기.

【청구항 18】

제 15항에 있어서,

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상기 위치 데이터는 기지국 또는 위성을 이용하는 위치 데이터 제공시스템이 제공하는 것을 특징으로 하는 단말기.

【청구항 19】

제 18항에 있어서,

상기 위치 데이터 제공시스템은 셀 위치 확인 시스템(CPS)을 통해 위치 데이터를 제공하는 것을 특징으로 하는 단말기.

【청구항 20】

제 18항에 있어서,

상기 위치 데이터 제공시스템은 위성 위치 확인 시스템(GPS)을 통해 위치 데이터를 제공하는 것을 특징으로 하는 단말기.

【청구항 21】

제 20항에 있어서,

상기 단말기는 상기 위치 데이터 제공시스템으로부터 위치 데이터를 수신하는 GPS 안테나를 더 포함하는 것을 특징으로 하는 단말기.

【청구항 22】

제 15항 또는 제 16항에 따른 단말기를 포함한 위치 기반 서비스 시스템으로서,

상기 단말기;

상기 단말기의 위치 데이터를 제공하는 위치 데이터 제공시스템;

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상기 위치 데이터를 기초로 사용자의 선택에 따라 서비스를 제공하는 서비스 시스템을 포함하는 위치 기반 서비스 시스템.

【청구항 23】

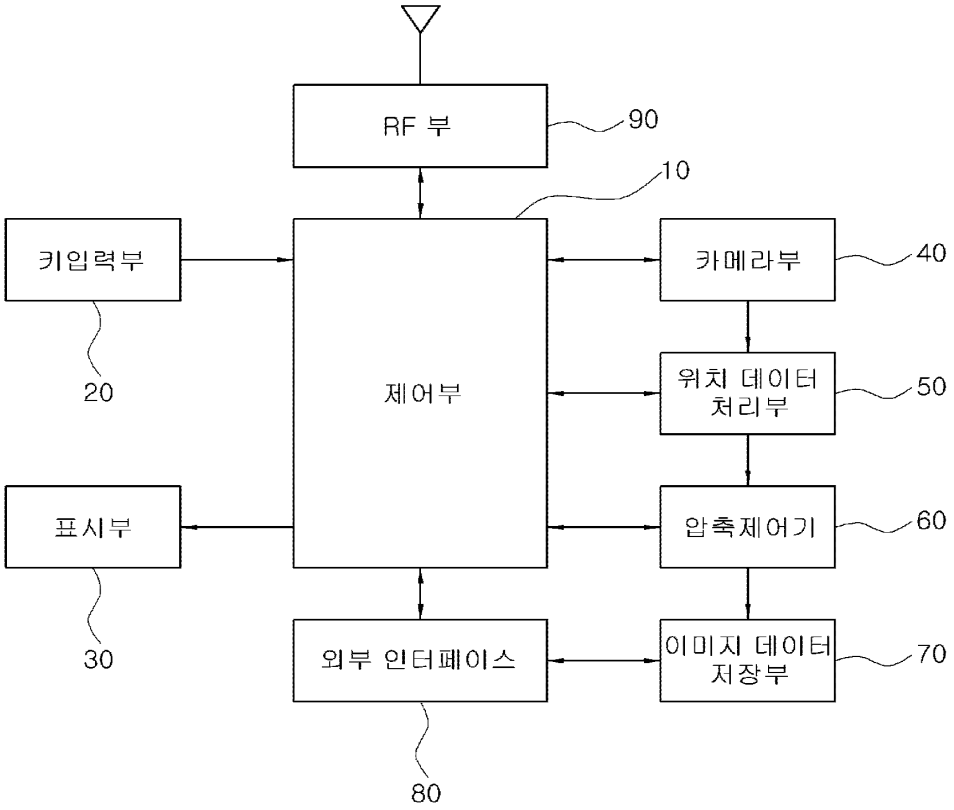
제 21항에 있어서,

상기 서비스 시스템은 지도 제공 시스템 또는 네비게이션 시스템인 것을 특징으로 하는 위치 기반 서비스 시스템.

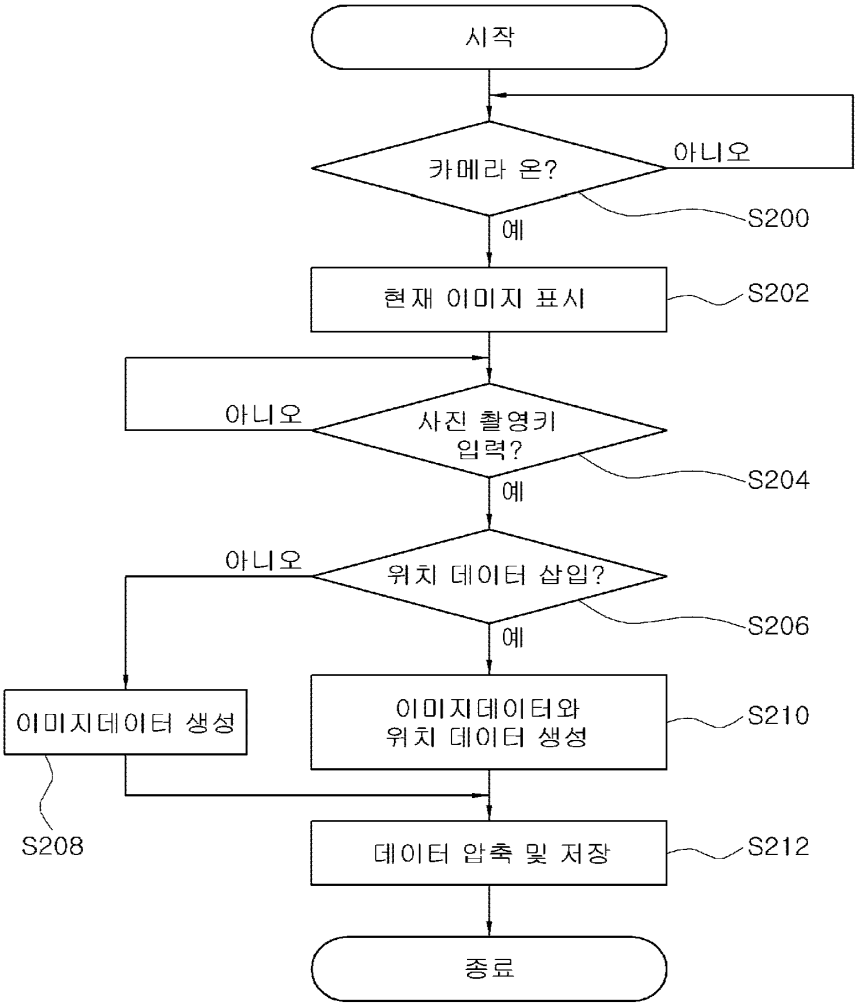
Exhibit 1004
Page 085 of 440

【도면】

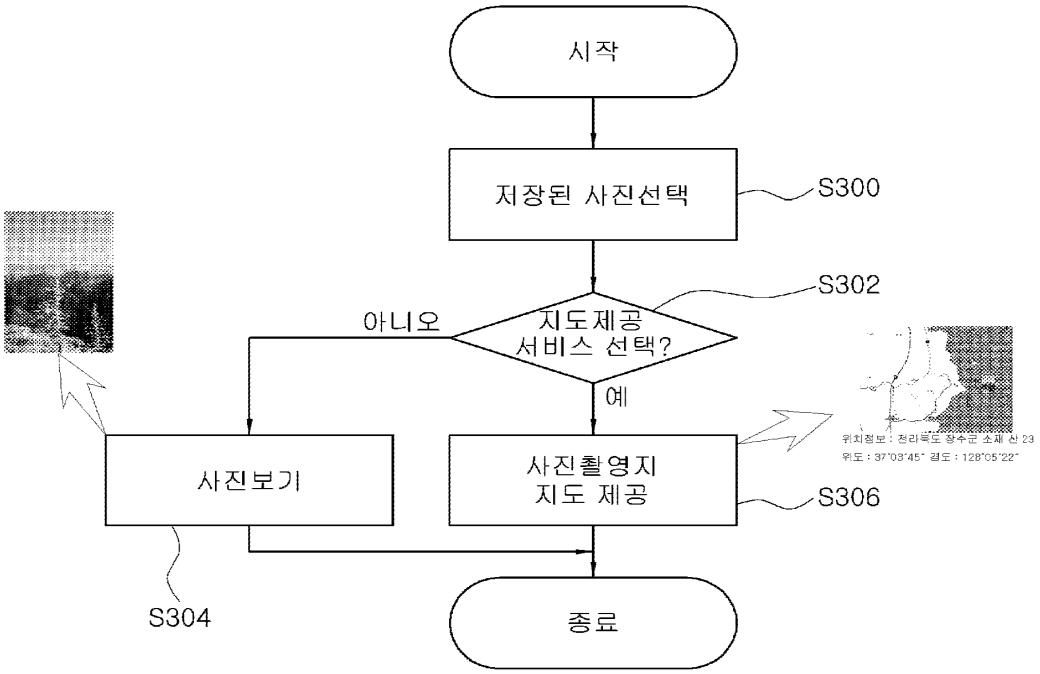
【도 1】


RF 부
90
10
키입력부
20
제어부
카메라부
40
위치 데이터 처리부
50
표시부
30
압축제어기
60
외부 인터페이스
80
이미지 데이터 저장부
70

【도 2】


시작
카메라 온?
아니오
S200
예
현재 이미지 표시
S202
아니오
사진 촬영키 입력?
S204
예
아니오
위치 데이터 삽입?
S206
예
이미지데이터 생성
이미지데이터와 위치 데이터 생성
S210
S208
데이터 압축 및 저장
S212
종료

【도 3a】


시작
저장된 사진선택
S300
S302
지도제공
서비스 선택?
아니오
예
사진보기
사진촬영지
지도 제공
S306
S304
종료
위치정보 : 전라북도 장수군 소재 산 23
위도 : 37°03'45" 경도 : 128°05'22"

【도 3b】

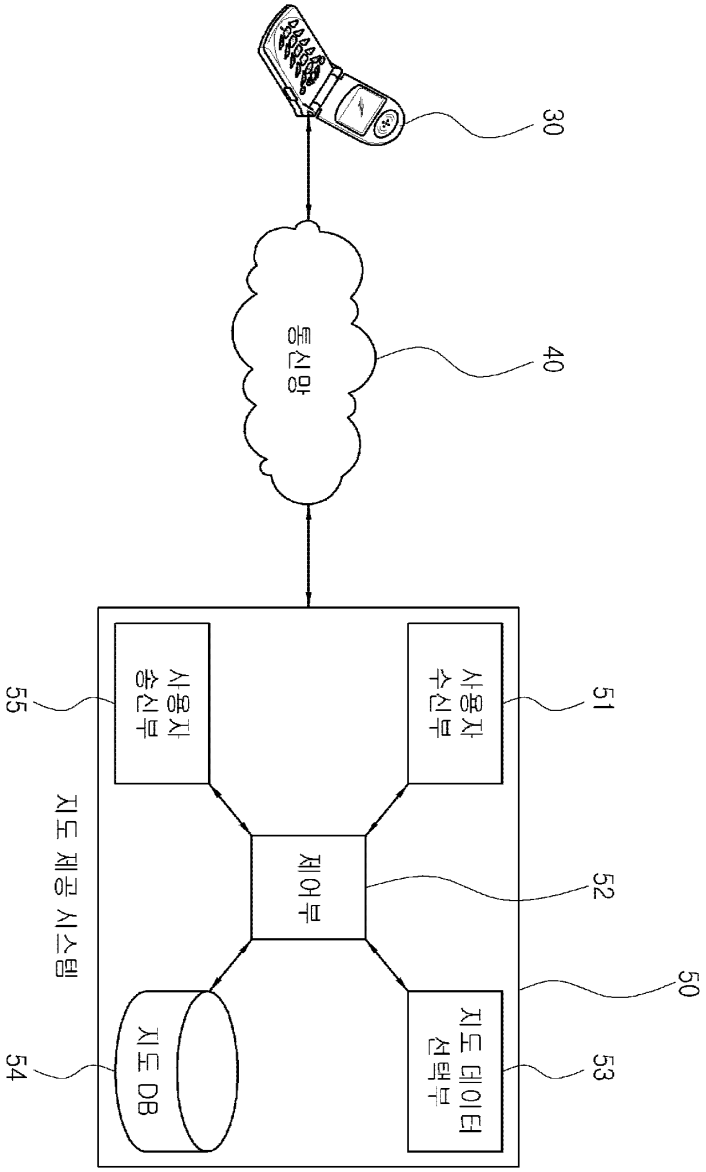
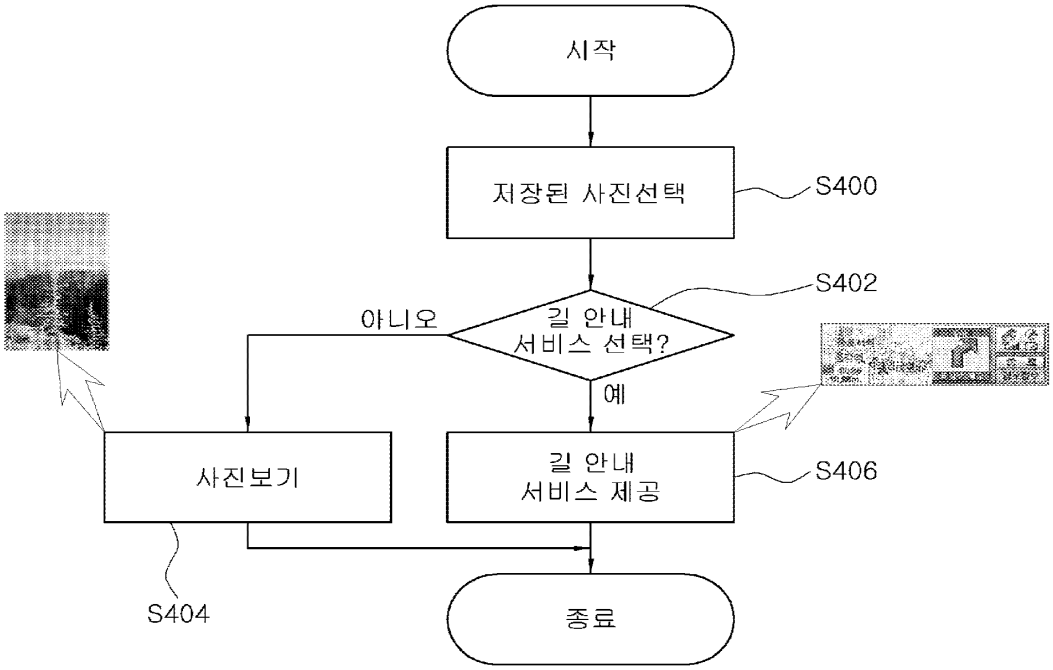


Exhibit 1004
Page 089 of 440

【도 4a】



【도 4b】

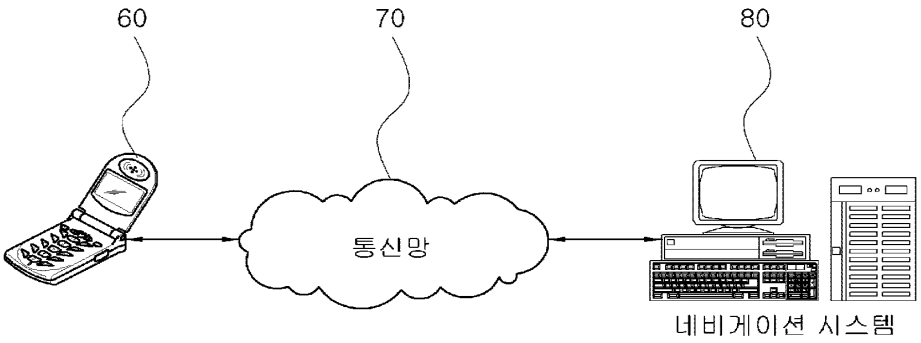


Exhibit 1004
Page 090 of 440

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/911,879	03/27/2008	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☐		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	310
☒ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	510
☒ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	210
TOTAL CLAIMS (37 CFR 1.16(i))	23 minus 20 =	* 3	X $ =		OR	X $50 =	150
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	* 0	X $ =			X $210 =	0
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	1180

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	10/18/2007	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $ =		OR	X $50=	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $210=	0
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/ROBERT TALBERT/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
11/911,879	Jin-Seung CHOI	4900-0009

22429
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

INTERNATIONAL APPLICATION NO.	
PCT/KR2006/001444	
I.A. FILING DATE	PRIORITY DATE
04/19/2006	04/19/2005

CONFIRMATION NO. 2595
371 FORMALITIES LETTER

OC000000028942126

Date Mailed: 03/20/2008

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- Priority Document
- Copy of the International Application filed on 10/18/2007
- Copy of the International Search Report filed on 10/18/2007
- Preliminary Amendments filed on 10/18/2007
- U.S. Basic National Fees filed on 10/18/2007
- Priority Documents filed on 10/18/2007

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

FORM PCT/DO/EO/905 (371 Formalities Notice)

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

VIRGINIA L IRBY

Telephone: (703) 308-9140 EXT 229

FORM PCT/DO/EO/905 (371 Formalities Notice)

DO/ EO WORKSHEET

Virginia Irby, Patent Application Specialist/ National Stage Division

U.S. Appl. No. 11/ 911879 International Appl. No. PCT/ KR06/01444

Application filed by : ☐ 20 months ☑ 30 months

WIPO PUBLICATION INFORMATION :

Publication No.: WO2006/ 112656 Publication Language : ☑ English ☐ German ☐ Japanese ☐ Chinese ☐ Korean ☐ French ☐ Spanish ☐ Russian ☐ Other : _____

Publication Date : 26 Oct 2006 Not Published : ☐ U.S. only designated ☐ EP request Published : ☐ EP request

INTERNATIONAL APPLICATION PAPERS IN THE APPLICATION FILE :

- ☑ International Application *(RECORD COPY)*
- ☐ Article 19 Amendments
- ☐ PCT/IPEA/409 IPER : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☐ KR ☐ ___
- ☐ Annexes to 409
- ☐ PCT/ISA/237 : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☐ KR ☐ ___
  - ☐ PCT/IPEA/409 or PCT/ISA/237 was NOT AVAILABLE at the time of paralegal review
- ☐ PCT/IB/306
- ☐ Request form PCT/RO/101
- ☑ PCT/ISA/210 - Search Report : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☑ KR ☐ ___ ☐ NONE
- ☐ Search Report References
- ☑ Priority Document (s) No. 1
  - ☐ N/A
  - ☐ Priority Document was NOT AVAILABLE at the time of paralegal review
- ☐ Other : _____

RECEIPTS FROM THE APPLICANT *(other than checked above) :*

- ☑ Basic National Fee *(or authorization to charge)*
- ☑ Description 7 ☑ Claims 3 ☑ Abstract
- ☑ Drawing Figure(s) - (# of drwgs. 5)
- ☐ Translation of Article 19 Amendments ☐ entered ☐ not entered :
  - ☐ not a page for page substitution
  - ☐ replaced by Article 34 Amendment
- ☐ Annexes to 409 ☐ entered ☐ not entered :
  - ☐ not a page for page substitution
  - ☐ no translation ☐ other : _____
- ☑ Application Data Sheet
- ☐ Power of Attorney
- ☐ Change of Address
- ☑ Preliminary Amendment(s) Filed on : 1. ☑ same as 371 request date 2. _____ 3. _____
- ☐ Information Disclosure Statement(s) Filed on : 1. ☐ same as 371 request date 2. _____ 3. _____
- ☐ Assignment Document (forwarded to Assignment Branch)
- ☐ Assignee Statement Under 37 CFR 3.73(b)
- ☐ Assignee PG Publication Notice
- ☐ Substitute Specification Filed on : 1. ☐ same as 371 request date 2. _____ 3. _____
- ☐ Verified Small Status Statement
- ☑ Oath/ Declaration (executed)
- ☐ Oath/ Declaration ☐ unsigned ☐ no citizenship ☐ other
- ☐ DNA Diskette ☐ Sequence Listing
- ☐ Other : _____

NOTES : ☑ I.A. used as Specification ☐ Other :

35 U.S.C. 371 - Receipt of Request (PTO-1390)	18 Oct 2007
Date Acceptable Oath/ Declaration Received	
Date of Completion of requirements under 35 U.S.C. 371	
Date of Completion of DO/ EO 903 - Notification of Acceptance	
Date of Completion of DO/ EO 905 - Notification of Missing Requirements	19 March 2008
Date of Completion of DO/ EO 909 - Notification of Abandonment	
Date of Completion of DO/ EO 916 - Notification of Defective Response	
Date of Completion of DO/ EO 922 - Notification to Comply w/ Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures	
Date of Completion of DO/ EO 923	

MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET

(FOR USE WITH FORM PTO-875)

SERIAL NO. 11/911879

FILING DATE

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
1	1		1			
2		1				
3		2				
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5		2				
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13		2				
14		2				
15	1		1			
16		1				
17		2				
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19		1				
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TOTAL IND.			2			
TOTAL DEP.			21			
TOTAL CLAIMS			23			

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
51						
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TOTAL IND.						
TOTAL DEP.						
TOTAL CLAIMS						

PTO - 1360 (REV. 11/04)

U.S. DEPARTMENT of COMMERCE
Patent and Trademark Office

PATENT APPLICATION FEE DETERMINATION RECORD

Effective December 8, 2004

Application or Docket Number: 11/911879

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)	SMALL ENTITY TYPE ☐		OR	OTHER THAN SMALL ENTITY	
			RATE	FEE		RATE	FEE
U.S. NATIONAL STAGE FEES							
BASIC FEE	SMALL ENT. = $ 150	LARGE ENT. = $ 300	BASIC FEE		OR	BASIC FEE	300
EXAMINATION FEE	Satisfies PCT Article 33(1)-(4) = $ 50 / $ 100	All other situations = $ 100 / $ 200	EXAM. FEE			EXAM. FEE	200
SEARCH FEE	U.S. is ISA = $ 50 / $ 100 ALL other countries = $ 200 / $ 400	ALL other situations = $ 250 / $ 500	SEARCH FEE			SEARCH FEE	400
FEE FOR EXTRA SPEC. PGS.	minus 100 =	/ 50 =	X $ 125 =			X $ 250 =	
TOTAL CHARGEABLE CLAIMS	23 minus 20 =	* 3	X $ 25 =		OR	X $ 50 =	150
INDEPENDENT CLAIMS	2 minus 3 =	*	X $ 100 =		OR	X $ 200 =	
MULTIPLE DEPENDENT CLAIM PRESENT		☐	+ $ 180 =		OR	+ $ 360 =	
* If the difference in column 1 is less than zero, enter "0" in column 2			TOTAL		OR	TOTAL	1050

CLAIMS AS AMENDED - PART II

AMENDMENT A

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM ☐				

SMALL ENTITY RATE	ADDITIONAL FEE	OR	OTHER THAN SMALL ENTITY RATE	ADDITIONAL FEE
X $ 25 =		OR	X $ 50 =	
X $ 100 =		OR	X $ 200 =	
+ $ 180 =		OR	+ $ 360 =	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT B

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM ☐				

SMALL ENTITY RATE	ADDITIONAL FEE	OR	OTHER THAN SMALL ENTITY RATE	ADDITIONAL FEE
X $ 25 =		OR	X $ 50 =	
X $ 100 =		OR	X $ 200 =	
+ $ 180 =		OR	+ $ 360 =	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than '20', enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than '3', enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER **4900-0009** U.S. APPLICATION NO. (if known, see 37 CFR 1.5) **11/911,879**
INTERNATIONAL APPLICATION NO. **PCT/KR2006/001444**	INTERNATIONAL FILING DATE **April 19, 2006**	PRIORITY DATE CLAIMED **April 19, 2005**

TITLE OF INVENTION

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLICANT(S) FOR DO/EO/US

Jin-Seung CHOI; Jae-Chul LIM; Jae-Bum PARK; Hong-Keun JI; Jong-Ho KIM; Do-Wan KIM; Hyun-Jun OH; Dong-Won NA; and Won-Hee SULL

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) as indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☐ is transmitted hereto (required only if not communicated by the International Bureau).
   b. ☐ has been communicated by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. ☐ is attached hereto.
   b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   b. ☐ have been communicated by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendment has NOT expired.
   d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ **An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).**
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☐ An Application Data Sheet under CFR 1.76
15. ☐ A substitute specification.
16. ☒ A **power of attorney** and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13*ter*.2 and 37 CFR 1.821–1.825
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4)
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)
20. ☐ Other items or information:

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
11//911,879	**PCT/KR2006/001444**	**4900-0009**

The following fees are submitted:	CALCULATIONS	PTO USE ONLY
21. ☒ Basic national fee (37 CFR 1.492(a)) **$31.00**	**PAID on 10/18/07**	
22. ☒ Examination fee (37 CFR 1.492(c)) If the written opinion prepared by USI/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** All other situations **$210.00**	**PAID on 10/18/07**	
23. ☒ Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority ..... **$100.00** International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... **$410.00** All other situations **$510.00**	**PAID on 10/18/07**	
TOTAL OF 21, 22 and 23 =	**$**	
☐ Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)). The fee is **$250** for each additional 50 sheets of paper or fraction thereof		

Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round **up** to a whole number)	RATE		
- 100 =	/50 =		× $260.00	**$**	
Surcharge of **$130.00** for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				**PAID on 10/18/07**	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	- 20 =	0	× $ 50.00	**$**	
Independent Claims	- 3 =	0	× $210.00	**$**	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ $370.00	**$**	
		TOTAL OF ABOVE CALCULATIONS =		**PAID on 10/18/07**	
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.				**$0.00**	
		SUBTOTAL =		**$0.00**	
Processing fee of **$130.00** for furnishing the English translation later than the 30 months from the earliest claimed priority date (37 CFR 1.492(f)). +				**$0.00**	
		TOTAL NATIONAL FEE =		**PAID on 10/18/07**	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +				**$0.00**	
		TOTAL FEES ENCLOSED =		**PAID on 10/18/07**	
				Amount to be refunded:	
				Amount to be charged	

a. ☐ A check in the amount of $ _____.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 07-1337 in the amount of $ ___ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy of this sheet is enclosed.

d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. Kindly use the attorneys' address associated with the following Customer Number for future correspondence.

SEND ALL CORRESPONDENCE TO:

LOWE HAUPTMAN HAM & BERNER, LLP
1700 Diagonal Road, Suite 300
Alexandria, VA 22314
(703) 684-1111

Customer No. 22429
PATENT TRADEMARK OFFICE

/Yoon S. Ham/
SIGNATURE
Yoon S. HAM
NAME
45,307
REGISTRATION NUMBER

DECLARATION AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention (Design, if applicable) entitled:

LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

the specification of which (check one):

- ☐ is attached hereto.
- ☑ was filed on October 18, 2007 as U.S. Patent Application No. 11/911,879.
- ☐ was filed on _____ as International Application (PCT) No. _____, and was amended on _____ _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose material information as defined in *Title 37, Code of Federal Regulations, § 1.56*. I hereby claim foreign priority benefits under *Title 35, United States Code § 119* of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which the priority is claimed.

PRIOR FOREIGN APPLICATION(S)

NUMBER	COUNTRY	DAY/MONTH/YEAR FILED	PRIORITY CLAIMED
10-2005-0032452	**Republic of Korea (KR)**	**19/04/2005**	☑ Yes ☐ No
			☐ Yes ☐ No

I hereby claim the benefit under *Title 35, United States Code, § 120* of any United States application(s) or PCT international application(s) designating The United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of *Title 35, United States Code, § 112*, I acknowledge the duty to disclose material information as defined in *Title 37, Code of Federal Regulations, § 1.56* which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

APPLICATION NUMBER	FILING DATE	STATUS (Patented, Pending or Abandoned)
PCT/KR2006/001444	**19/April/2006**	**Pending**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine, or imprisonment, or both, under *Section 1001 of Title 18 of the United States Code*, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: I (We) hereby appoint as my (our) attorneys all practitioners associated with customer number 22429, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office

Send correspondence to:
LOWE HAUPTMAN HAM & BERNER, LLP
CUSTOMER NO. 22429
1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314

TELEPHONE CALLS TO:
Yoon S. Ham
(703) 535-7340

I hereby authorize the U.S. attorneys and agents named herein to accept and follow instructions from KIM, CHOI & LIM to any actions to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and the undersigned. In the event of a change in the person(s) from whom instructions may be taken, the U.S. attorneys will be so notified by the undersigned.

☑ *See following page(s) for additional joint inventors.*

Full name of sole or first inventor: **Jin-Seung CHOI**
Inventor's signature: Choi js Date: NOV/21/2007
Residence : Seoul, Republic of Korea
Citizenship: Republic of Korea
Post Office Address: 120-402 HanjinGrangvill Apt., Wolgye 3-dong, Nowon-gu, Seoul 101-125, Republic of Korea

DECLARATION AND POWER OF ATTORNEY

Full Name of Second Inventor: **Jae-Chul LIM**
Inventor's signature: Date: 0CT/24/2007
Residence: Seoul, Republic of Korea
Citizenship: Republic of Korea
Post Office Address: 101-902 Gyeonghyangrexvill, Sangdo 4-dong, Dongjak-gu, Seoul 156-034, Republic of Korea

Full Name of Third Inventor: **Jae-Bum PARK**
Inventor's signature: Date: OCT./24/2007
Residence: Seoul, Republic of Korea
Citizenship: Republic of Korea
Post Office Address: 102-505 Dongyang Express Apt., Umyeon-dong, Seocho-gu, Republic of Korea

Full Name of Fourth Inventor: **Hong-Keun JI**
Inventor's signature: Date: OCT. 24. 2007
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Full Name of Fifth Inventor: **Jong-Ho KIM**
Inventor's signature: Date: OCT. 24. 2007
Residence: Seoul, Republic of Korea
Citizenship: Republic of Korea
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Full Name of Sixth Inventor: **Do-Wan KIM**
Inventor's signature: Date: 2007. 10. 24
Residence: Seoul, Republic of Korea
Citizenship: Republic of Korea
Post Office Address: B-813, Hyundai Millart 2-cha, 1300, Baekseok-dong, Ilsan-gu, Goyang-si, Gyeonggi-do 410-815, Republic of Korea

DECLARATION AND POWER OF ATTORNEY

Full Name of Seventh Inventor: **Hyun-Jun OH**	
Inventor's signature:	Date: 29 OCT 2007
Residence: Seoul, Republic of Korea	
Citizenship: Republic of Korea	
Post Office Address: 629-15 Irwon-dong, Gangnam-gu, Seoul 135-230, Republic of Korea	

Full Name of Eighth Inventor: **Dong-Won NA**	
Inventor's signature: DONGWON NA	Date: 2 NOV 2007
Residence: Seongnam-si, Gyeonggi-do, Republic of Korea	
Citizenship: Republic of Korea	
Post Office Address: 214-804 Mujigaemaeul LG Apt., Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-705, Republic of Korea	

Full Name of Ninth Inventor: **Won-Hee SULL**	
Inventor's signature: W. H. SULL	Date: 2007. 11. 5.
Residence: Seoul, Republic of Korea	
Citizenship: Republic of Korea	
Post Office Address: 101-404 Hanareum Apt., Suseo-dong, Gangnam-gu, Seoul 135-884, Republic of Korea	

Full Name of Tenth Inventor:	
Inventor's signature:	Date:
Residence:	
Citizenship:	
Post Office Address:	

Full Name of Eleventh Inventor:	
Inventor's signature:	Date:
Residence:	
Citizenship:	
Post Office Address:	

Electronic Acknowledgement Receipt

EFS ID:	3061002
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA
First Named Inventor/Applicant Name:	Jin-Seung CHOI
Customer Number:	22429
Filer:	Yoon Ham/Kwang Yup Chae
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	27-MAR-2008
Filing Date:	
Time Stamp:	13:39:17
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Response to Pre-Exam Formalities Notice	80327_4900-0009_Missing_Response.pdf	37418 67cff328aa4a2a0e133b0ccfe89aefea883c867e	no	2

Warnings:	
Information:	

2	Oath or Declaration filed	80327_4900-0009_Oath.pdf	209375 350f50f614ca1f43ff91d4995f2e67e7f2a98e38	no	3

Warnings:	
Information:	
Total Files Size (in bytes):	246793

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

DO/ EO WORKSHEET

Virginia Irby, Patent Application Specialist/ National Stage Division

U.S. Appl. No. 11/ 911879 International Appl. No. PCT/KR06/01444

Application filed by : ☐ 20 months ☑ 30 months

WIPO PUBLICATION INFORMATION :

Publication No.: WO2006/112656 Publication Language : ☑ English ☐ German ☐ Japanese ☐ Chinese ☐ Korean ☐ French ☐ Spanish ☐ Russian ☐ Other : _____

Publication Date : 26 Oct 2006 Not Published : ☐ U.S. only designated ☐ EP request Published : ☐ EP request

INTERNATIONAL APPLICATION PAPERS IN THE APPLICATION FILE :

- ☑ International Application *(RECORD COPY)*
- ☐ Article 19 Amendments
- ☐ PCT/IPEA/409 IPER : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☐ KR ☐ ___
- ☐ Annexes to 409
- ☐ PCT/ISA/237 : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☐ KR ☐ ___
  - ☐ PCT/IPEA/409 or PCT/ISA/237 was NOT AVAILABLE at the time of paralegal review
- ☐ PCT/IB/306
- ☐ Request form PCT/RO/101
- ☑ PCT/ISA/210 - Search Report : ☐ EP ☐ JP ☐ SE ☐ AU ☐ US ☐ FR ☐ CN ☐ ES ☐ RU ☐ AT ☑ KR ☐ ___ ☐ NONE
- ☐ Search Report References
- ☑ Priority Document (s) No. 1
  - ☐ N/A
  - ☐ Priority Document was NOT AVAILABLE at the time of paralegal review
- ☐ Other : _____

RECEIPTS FROM THE APPLICANT *(other than checked above) :*

- ☑ Basic National Fee *(or authorization to charge)*
- ☑ Description 7 ☑ Claims 3 ☑ Abstract
- ☑ Drawing Figure(s) - (# of drwgs. 5)
- ☐ Translation of Article 19 Amendments ☐ entered ☐ not entered :
  - ☐ not a page for page substitution
  - ☐ replaced by Article 34 Amendment
- ☐ Annexes to 409 ☐ entered ☐ not entered :
  - ☐ not a page for page substitution
  - ☐ no translation ☐ other : _____
- ☑ Application Data Sheet
- ☐ Power of Attorney
- ☐ Change of Address
- ☑ Preliminary Amendment(s) Filed on : 1. ☑ same as 371 request date 2. _____ 3. _____
- ☐ Information Disclosure Statement(s) Filed on : 1. ☐ same as 371 request date 2. _____ 3. _____
- ☐ Assignment Document (forwarded to Assignment Branch)
- ☐ Assignee Statement Under 37 CFR 3.73(b)
- ☐ Assignee PG Publication Notice
- ☐ Substitute Specification Filed on : 1. ☐ same as 371 request date 2. _____ 3. _____
- ☐ Verified Small Status Statement
- ☑ Oath/ Declaration (executed) 27 March 2008
- ☐ Oath/ Declaration ☐ unsigned ☐ no citizenship ☐ other
- ☐ DNA Diskette ☐ Sequence Listing
- ☐ Other : _____

NOTES : ☑ I.A. used as Specification ☐ Other :

35 U.S.C. 371 - Receipt of Request (PTO-1390)	18 Oct 2007
Date Acceptable Oath/ Declaration Received	27 March 2008
Date of Completion of requirements under 35 U.S.C. 371	27 March 2008
Date of Completion of DO/ EO 903 - Notification of Acceptance	08 April 2008
Date of Completion of DO/ EO 905 - Notification of Missing Requirements	19 March 2008
Date of Completion of DO/ EO 909 - Notification of Abandonment	
Date of Completion of DO/ EO 916 - Notification of Defective Response	
Date of Completion of DO/ EO 922 - Notification to Comply w/ Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures	
Date of Completion of DO/ EO 923	

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/911,879	03/27/2008	Jin-Seung CHOI	4900-0009

CONFIRMATION NO. 2595

22429
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA22314

Date Mailed. 04/10/2008

NOTICE OF NEW OR REVISED PROJECTED PUBLICATION DATE

The above-identified application has a new or revised projected publication date. The current projected publication date for this application is 07/17/2008. If this is a new projected publication date (there was no previous projected publication date), the application has been cleared by Licensing & Review or a secrecy order has been rescinded and the application is now in the publication queue.

If this is a revised projected publication date (one that is different from a previously communicated projected publication date), the publication date has been revised due to processing delays in the USPTO or the abandonment and subsequent revival of an application. The application is anticipated to be published on a date that is more than six weeks different from the originally-projected publication date.

More detailed publication information is available through the private side of Patent Application Information Retrieval (PAIR) System. The direct link to access PAIR is currently http://pair.uspto.gov. Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Questions relating to this Notice should be directed to the Office of Patent Publication at 1-888-786-0101.

PART 1 - ATTORNEY/APPLICANT COPY

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
11/911,879	Jin-Seung Choi	4900-0009

22429
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

INTERNATIONAL APPLICATION NO.	
PCT/KR2006/001444	
I.A. FILING DATE	PRIORITY DATE
04/19/2006	04/19/2005

CONFIRMATION NO. 2595
371 ACCEPTANCE LETTER

OC000000029301090

Date Mailed: 04/14/2008

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

03/27/2008	03/27/2008
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS	DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** *The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363).* Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 10/18/2007
- Copy of the International Search Report filed on 10/18/2007
- Preliminary Amendments filed on 10/18/2007
- Oath or Declaration filed on 03/27/2008
- Request for Immediate Examination filed on 03/27/2008
- U.S. Basic National Fees filed on 10/18/2007
- Priority Documents filed on 10/18/2007

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

VIRGINIA L IRBY

Telephone: (703) 308-9140 EXT 229

FORM PCT/DO/EO/903 (371 Acceptance Notice)

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
11/911,879	03/27/2008	1794	1210	4900-0009	23	2

CONFIRMATION NO. 2595

22429
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

FILING RECEIPT

OC00000002930108 9

Date Mailed: 04/14/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Jin-Seung Choi, Seoul, KOREA, REPUBLIC OF;
Jae-Chul Lim, Seoul, KOREA, REPUBLIC OF;
Jae-Bum Park, Seoul, KOREA, REPUBLIC OF;
Hong-Keun Jl, Seoul, KOREA, REPUBLIC OF;
Jong-Ho Kim, Seoul, KOREA, REPUBLIC OF;
Do-Wan Kim, Seoul, KOREA, REPUBLIC OF;
Hyun-Jun Oh, Seoul, KOREA, REPUBLIC OF;
Dong-Won Na, Gyeonggi-do, KOREA, REPUBLIC OF;
Won-Hee Sull, Seoul, KOREA, REPUBLIC OF;

Assignment For Published Patent Application

SK TELECOM CO., LTD., Seoul, KR

Power of Attorney: The patent practitioners associated with Customer Number 22429

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/KR2006/001444 04/19/2006

Foreign Applications

REPUBLIC OF KOREA 10-2005-0032452 04/19/2005

If Required, Foreign Filing License Granted: 04/08/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 11/911,879**

Projected Publication Date: 07/17/2008

Non-Publication Request: No

Early Publication Request: No

Title

Location-Based Service Method and System Using Location Data Included in Image Data

Preliminary Class

428

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009

CONFIRMATION NO. 2595

22429
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

PUBLICATION NOTICE

OC000000031021814

Date Mailed: 07/17/2008

Title: Location-Based Service Method and System Using Location Data Included in Image Data

Publication No.US-2008-0171558-A1
Publication Date:07/17/2008

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

PLUS Search Results for S/N 11911879, Searched Tue Oct 05 08:11:30 EDT 2010

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

5365516 99	6021250 86	5596565 84
5526357 99	6085099 86	5602986 84
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 10/13/2010

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	**PAPER NUMBER**
2617	

MAIL DATE	DELIVERY MODE
10/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/911,879	CHOI ET AL.	
	Examiner	Art Unit	
	KUO WOO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings submitted on 3/27/2008. These drawings are reviewed and accepted by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9, 11-18 and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsubaki et al (US PGPub 2002/0101619 A1).

Regarding claims 1 and 15, Tsubaki discloses "(a) a step of generating first image data with the terminal at a predetermined location" (¶24, which recite predetermined location to be photographed which digital camera displays the subject information on the subject to be photographed, so that before photographing, thereby enabling the subject to be confirmed on the basis of the displayed subject information.);

"(b) A step of receiving the location data" (¶22, which recite the additional location information of subject image that input from an external device is recorded in connection with an image of the subject);

"(c) A step of inserting the received location data into the first image data and generating second image data" (¶24, which recite the additional location information is added to first image that the photographed image of the subject has his or her identification information recorded thereon in connection therewith);

"d) A step of displaying the image corresponding to the first image data and providing a service (¶143, which recite one of service is providing map database and tour service that the display information contains texts such as a place name and tourist information as well as an image such as a map, all these pieces of information being read out from the map database on the basis of the GPS information) using the location data, when the second image data are selected".

Regarding claims 2 and16, Tsubaki discloses "a step of compressing and storing the second image data, after the step (c)" (¶26, which recite retrieve stored location information that from the database having the subject information already stored in connection with the subject identification information, and transmitting the subject information read from the database, to the digital camera together with the identification information read from the recording medium).

Regarding claims 3 and 17, Tsubaki discloses "(d1) a step of selecting the map providing service" (¶174, which recite location information can be selected from map database that the GPS information obtained, the car navigation apparatus obtains a

place name corresponding to the GPS information, from the map database 510 as text information.);

"(d2) a step of transmitting a service request signal (¶173, which recite request map information from digital camera from the car navigation apparatus 500 (step S114) and the location data to a map providing system" (¶174 which recite map information from database that the car navigation apparatus obtains a place name corresponding to the GPS information, from the map database 510 as text information);

"(d3) a step wherein the map providing system provides a map corresponding to the location data" (¶174 , which recite map corresponding location data is transmitted to digital camera that the car navigation apparatus uses this text information as a display information, that is, the place name, to generate locational information containing the GPS information as added-to-image information (step S156). The thus generated locational information is transmitted to the digital camera 400).

Regarding claims 4 and22, Tsubaki discloses "wherein the map includes at least one of geographical information, traffic information (¶157, which recite traffic condition of vehicle that while displaying, on the map, a mark or the like which is indicative of the current location of the vehicle.), administrative district information, and information including the latitude and the longitude of the location data." (¶157, which recite that, reads out the map information from the map database 510 on the basis of GPS information such as the current latitude, longitude).

Regarding claim 5, Tsubaki discloses "the step of selecting a type of the map, after the step (d1)" (¶155, which recite one of map for name of place and tourist

information map that a map database 510 such as a CD-ROM which has map information recorded thereon and including image information such as maps and text information such as the names of places and tourist information,).

Regarding claims 6 and 23, Tsubaki discloses “a step of selecting the guiding service” (¶155, which recite one of map for name of place and tourist (guiding service) ;

“(d2) a step of transmitting the service request signal and the location data to a navigation system” (¶174, which recite that on the basis of the GPS information obtained, the car navigation apparatus obtains a place name corresponding to the GPS information, from the map database 510 as text information);

“(d3) a step wherein the navigation system provides the navigation data corresponding to the location data” (¶174, which recite the navigation system using map information that The car navigation apparatus uses this text information as a display information, that is, the place name, to generate locational information containing the GPS information as added-to-image information (step S156).

Regarding claim 7, Tsubaki discloses “wherein the current location data of the terminal are further transmitted to the navigation system in the step (d2)” (¶174, which recite that current locational information is transmitted to the digital camera 400 (step S158) wherein also collocated with GPS navigation system).

Regarding claims 9, 11, 18 and 20-21, Tsubaki discloses “wherein the location data (¶13, which recite GPS provided location information that a large number of cameras have been proposed which record GPS information such as latitude and

longitude which is measured using a GPS (Global Positioning System) together with the photographed image) are provided by the location data providing system".

Regarding claim 12, Tsubaki discloses "wherein the location data includes the information on the latitude and the longitude of the terminal or the base station (¶13 which recite that a large number of cameras have been proposed which record GPS Information such as latitude and longitude which is measured using a GPS (Global Positioning System) together with the photographed image).

Regarding claim 13, Tsubaki discloses "wherein the terminal equipped with the (Abstract, which recite the terminal can be transceiver with digital camera and GPS that Further, the digital camera obtains locational information from a car navigation apparatus. The locational information is classified into added-to-image information added to the subject image (GPS information indicative of latitude, longitude, and altitude) and display information associated with the added-to-image information (the place name corresponding to the GPS information)) includes a camera phone or a digital camera."

Regarding claim 14 Tsubaki discloses" wherein the digital camera includes a module which can receive the location data" (Abstract, which recite terminal subsequently, after photographing has been completed, the added-to-image information (GPS information) of the locational information stored in the non-volatile memory in connection with the image).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubaki as applied to claims 1-7 above, and further in view of Walker et al. (US PAT 6,199,014).

Regarding claim 8, Tsubaki discloses “traffic information of vehicle current information. However, Tsubaki does not explicitly disclose “wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, and the turnaround time”.

In an analogous art, Walker discloses (Abstract, which recite system provide the starting and destination points, geographic information and photographic information are processed to determine a route for travel to the destination point. Navigational instructions for traveling the route are generated, including representations of photographs) and (Col. 1, Lines 9, which recite shortest route and turnaround time can be customized that computerized navigation systems are now available which enable a traveler to follow a customized route to his destination).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsubaki teaching in location information insert with image and in combination of Walker provides customized route information that

navigational instructions and the photographic representations of geographic locations are outputted in a sequence, thereby providing a sequence of directions and photographic representations of geographic locations along the route. (See Abstract).

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Use of known technique to improve similar device in the same way.

7. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubaki as applied to claims 1-7 above, and further in view of Banno (US PGPub 2002/0049064 A1).

Regarding claims 10 and19, Tsubaki discloses Location information by GPS system. However, Tsubaki does not explicitly disclose "wherein the location data providing system provides the location data of the terminal using a Cell Positioning System (CPS)".

In an analogous art, Banno discloses (¶10 which recite Cell Position system for mobile terminal based on the position information acquired by the first and second acquisition means and the position information input for the target position, calculates the angle formed between a line joining the current position and a base station and a line joining the current position and the target position, a first locating means, which, based on a received level of a signal transmitted from the base station, locates the direction to the location of the base station, and a second locating means, which, based on the direction located by the first locating means and the angle calculated by the calculation means, locates the direction to the target position)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsubaki teaching in location information insert with image and in combination of Banno provides acquires position information of a base station having a stored position, a second acquisition means, which acquires position information for a current position, a calculation means, which, based on the position information acquired by the first acquisition and joining the current position and the base station (See Abstract).

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Use of known technique to improve similar device in the same way.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/HUY PHAN/
Primary Examiner, Art Unit 2617

Notice of References Cited	Application/Control No. 11/911,879	Applicant(s)/Patent Under Reexamination CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,199,014 B1	03-2001	Walker et al.	701/211
*	B	US-2002/0049064 A1	04-2002	Banno, Satoshi	455/456
*	C	US-2002/0101619 A1	08-2002	Tsubaki et al.	358/302
*	D	US-6,437,797 B1	08-2002	Ota, Yoshinori	345/638
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/05/2010								
	1	✓								
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	22	✓								
	23	✓								

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010	KW
PCT search	10/4/2010	KW

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

/KUO WOO/ Examiner.Art Unit 2617	

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BIB DATA SHEET

CONFIRMATION NO. 2595

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
11/911,879	03/27/2008 RULE	428	2617	4900-0009

APPLICANTS

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**** CONTINUING DATA ***************************

This application is a 371 of PCT/KR2006/001444 04/19/2006

**** FOREIGN APPLICATIONS ***************************

REPUBLIC OF KOREA 10-2005-0032452 04/19/2005

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****

04/08/2008

Foreign Priority claimed	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☑ Yes ☐ No	KOREA, REPUBLIC OF	5	23	2

35 USC 119(a-d) conditions met ☑ Yes ☐ No ☐ Met after Allowance

Verified and Acknowledged /KUO WOO/ Examiner's Signature ____ Initials

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UNITED STATES

TITLE

Location-Based Service Method and System Using Location Data Included in Image Data

FILING FEE RECEIVED		
1210	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	17	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$). did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT	ADJ	ON	2010/10/05 21:43
L5	3	l4 and route and traffic	US-PGPUB; USPAT	ADJ	ON	2010/10/05 21:44
L6	5	l4 and base station	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:03
L9	5	l4 and base station and position	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:04
L10	1	l4 and base station and position system	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:04
S1	1	"11911879"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:07
S2	47	"6437797"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S3	1	"6437797".pn.	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S4	1	"7664296".pn.	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S5	2	"20020101619"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:09

S6	53	("4737927" | "5283562" | "5500743" | "5550584" | "5638184" | "5682441" | "5748109" | "5784059" | "5835266").PN. OR ("6437797").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:10
S7	24	("20020036565" | "20020152390" | "20070047770" | "4768099" | "4992887" | "5307297" | "5334823" | "5412727" | "5467403" | "5579393" | "5724155" | "5737491" | "5865745" | "5920317" | "5960155" | "6023241" | "6038012" | "6038333" | "6040783" | "6128398" | "6381348" | "6535243" | "6542627" | "6633223").PN. OR ("7664296").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:11
S8	145	("5124915" | "5414462" | "5517419" | "5596494" | "5878356" | "5894323" | "5904724").PN. OR ("6023241").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:12
S9	2	"20020135680"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:13
S10	1	"20020049064"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:14
S11	198	(US-5365516-$ or US-5526357-$ or US-5303393-$ or US-5388074-$ or US-6047192-$ or US-5382508-$ or US-5689245-$ or US-5742509-$ or US-4605921-$ or US-4949287-$ or US-4994971-$ or US-5493709-$ or US-5524234-$ or US-5611064-$ or US-	USPAT	ADJ	ON	2010/10/05 18:14

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S14	2	S11 and image and map and location and GPS not S13	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:18
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		("6199014").URPN.				
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S18	81	455/456.2 and image and map and guid$3 and location and GPS	US-PGPUB; USPAT	ADJ	ON	2010/10/05 19:33
S19	21	455/456.2 and image and map and guid$3 and location and GPS and camera	US-PGPUB; USPAT	ADJ	ON	2010/10/05 19:33

EAST Search History (Interference)

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10/5/2010 10:35:54 PM
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PTO/SB/08a (01-10)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	11911879
Filing Date	2008-03-27
First Named Inventor	Jin-Seung CHOI et al.
Art Unit	2617
Examiner Name	Kuo-Kong Woo
Attorney Docket Number	4900-0009

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6437797		2002-08-20	FUJI PHOTO FILM CO., LTD.	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020101619		2002-08-01	HISAYOSHI TSUBAKI ET AL.	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	06-261244	JP		1994-09-16	TAMRON CO LTD		☐
	2	2000-235580	JP		2000-08-29	HITACHI ZOSEN CORP		☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	11911879
	Filing Date	2008-03-27
	First Named Inventor	Jin-Seung CHOI et al.
	Art Unit	2617
	Examiner Name	Kuo-Kong Woo
	Attorney Docket Number	4900-0009

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Korea Office Action for application no. 10-2005-0032452, citing the above reference(s).	☐
	2	International Search Report for application no. PCT/KR2006/001444, citing the above reference(s).	☐

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Examiner Signature		Date Considered	

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[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	11911879
	Filing Date	2008-03-27
	First Named Inventor	Jin-Seung CHOI et al.
	Art Unit	2617
	Examiner Name	Kuo-Kong Woo
	Attorney Docket Number	4900-0009

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Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yoon S. Ham/	Date (YYYY-MM-DD)	2011-01-13
Name/Print	Yoon S. Ham	Registration Number	45307

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **06-261244**
(43)Date of publication of application : **16.09.1994**

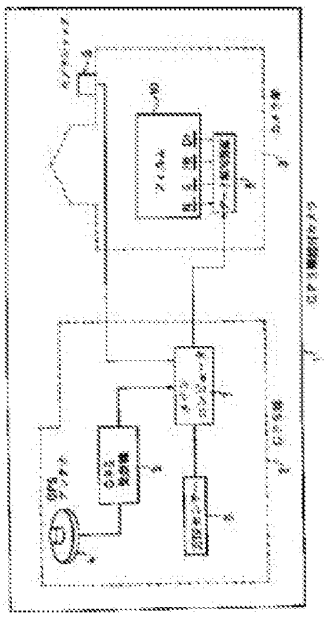
(51)Int.Cl. H04N 5/232
G03B 17/24

(21)Application number : **05-044765**
(22)Date of filing : **05.03.1993**

(71)Applicant : **TAMRON CO LTD**
(72)Inventor : **OKAWA TETSUO**

(54) CAMERA PROVIDED WITH GPS FUNCTION

(57)Abstract:
PURPOSE: To enhance the value of a camera by being effective for the circumstantial confirmation of immovables, the safety of climbings/hikings and the location specifying of a picture, or the like whose photographing spot is unknown by imprinting the data of a photographing place in a photographing film while linking a camera GPS device.
CONSTITUTION: A GPS (global positioning system) antenna 4 receives the radio wave signal from four navigating artificial satellites, introduces the radio wave signal from each artificial satellite into a GPS receiver 5, a calculates the coordinate of a camera provided with GPS function and outputs data to a main computer 7. A bearing sensor 6 detects the photographing direction of the camera 1 and outputs it to the computer 7. The computer 7 inputs the coordinate output from the receiver 5, the bearing from the sensor 6 and the shutter output from a camera shutter 9. A camera part 3 incorporates a film 10 and a data imprinting device 8 and exposes the coordinate data of longitude and latitude and an altitude and bearing data to be outputted from the computer 7 in the film 10.



(19)日本国特許庁（ＪＰ）　(12) **公開特許公報**（Ａ）　(11)特許出願公開番号

特開平6－261244

(43)公開日　平成６年(1994)９月16日

(51)Int.Cl.[5]	識別記号	庁内整理番号	ＦＩ	技術表示箇所
Ｈ０４Ｎ　5/232	Ｚ			
Ｇ０３Ｂ　17/24		7256－2Ｋ		

審査請求　未請求　請求項の数１　ＯＬ　（全　３　頁）

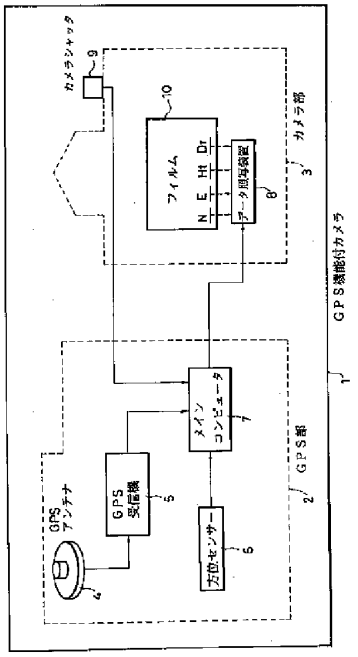
(21)出願番号　特願平5－44765

(22)出願日　平成５年(1993)３月５日

(71)出願人　000133227
株式会社タムロン
東京都北区滝野川７丁目17番11号
(72)発明者　大川　哲夫
東京都中央区佃１丁目11番６－1805号
(74)代理人　弁理士　吉村　悟

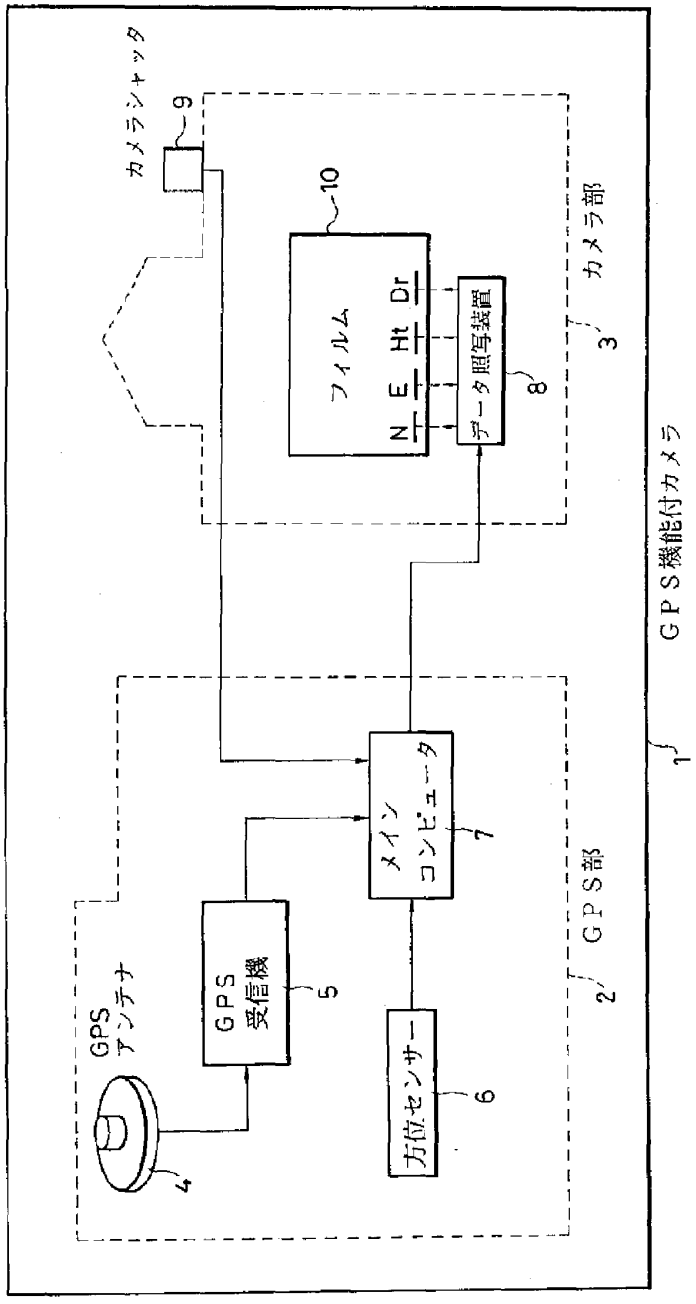
(54)【発明の名称】　ＧＰＳ機能付カメラ

(57)【要約】
【目的】　カメラの撮影場所に関する情報を得る。
【構成】　カメラ３とＧＰＳ（グローバル・ポジショニング・システム）装置２を連繋して、撮影フィルム１０に、経度Ｅ、緯度Ｎ、高度Ｈｔおよび撮影方位Ｄｒのデータを写しこむ。



【特許請求の範囲】
【請求項１】　カメラにＧＰＳ装置を連繋させて、前記ＧＰＳ装置の出力データを撮影フィルムに写しこむことを特徴とするＧＰＳ機能付カメラ。
【発明の詳細な説明】
【０００１】
【産業上の利用分野】ＧＰＳ（グローバル・ポジショニング・システム）により、航行人工衛星からの電波を用いて、撮影時の現在位置（経度・緯度・高度）および撮影方位のデータを得ることができるカメラに関するものである。
【０００２】
【従来の技術】ＧＰＳは現在位置を特定するデータを得る手段として、近年特に発達してきており、自動車のナビゲーションシステムとしても採用され、装置の小型化、高精度化、低価格が顕著に進んでいる。一方、カメラにおいては写真撮影日時をフィルムに記録する機能を内蔵するものが広く用いられている。
【０００３】
【発明が解決しようとする課題】写真撮影において、撮影位置および方向をフィルムに記録することが可能であれば、後日、写真に記録されたデータが地図と対比できるのできわめて便利である。
【０００４】
【課題を解決するための手段】上記の目的を達成するために、本発明は、カメラにＧＰＳ装置を連繋させて、このＧＰＳ装置の出力データを撮影フィルムに写しこむようにした。
【０００５】
【作用】このように構成されたものにおいては、撮影時のフィルムに、ＧＰＳ装置からの出力データである経緯度、高度、撮影方位を正確に記録することができる。
【０００６】
【実施例】以下図面に基づいて本発明の実施例を説明する。図１において、１はＧＰＳ機能付カメラで、ＧＰＳ部２およびカメラ部３からなる。ＧＰＳ部２は、航行人工衛星からの電波を受信するＧＰＳアンテナ４、ＧＰＳアンテナ４からの出力を入力するＧＰＳ受信機５、ＧＰＳ機能付カメラ１の撮影方位を検出する方位センサ６およびメインコンピュータ７から構成される。
【０００７】メインコンピュータ７は、ＧＰＳ受信機５からの座標出力、方位センサ６からの方位出力およびカメラシャッタ９からのシャッタ出力を入力する。一方カメラ部３は、フィルム１０およびデータ照写装置８を内蔵し、メインコンピュータ７から出力される経緯度および高度の座標データ並びに方位データをフィルム１０に感光させる。図中Ｎは緯度、Ｅは経度、Ｈｔは高度、Ｄｒは方位を示すデータが表示されることを示す。
【０００８】一般的に、ＧＰＳアンテナ４は航行する４つの人工衛星からの電波信号を受信し、これらの各人工衛星からの電波信号をＧＰＳ受信機５に導入し、ＧＰＳ機能付カメラ１の座標（経度、緯度、高度）を算出し、これらのデータをメインコンピュータ７へ出力する。一方、方位センサ６はＧＰＳ機能付カメラ１の撮影方向を検出し、メインコンピュータ７へ出力する。
【０００９】カメラシャッタ９を作動させると、データ照写装置８は、メインコンピュータ７から経度、緯度、高さおよび方位のデータを取り込んで、フィルム１０上に感光させる。データ照写装置８については、公知のものが使用可能である。
【００１０】
【発明の効果】以上説明したとおり、本発明に係るＧＰＳ機能付カメラは、カメラにＧＰＳ装置を連繋させて、撮影フィルムに撮影場所のデータを写しこむようにしたので、後日、写真上のデータと地図とを対比して、例えば山、川等の名称が確認でき、更に詳細な展望データを正確に得ることができる。このため、不動産の状況確認、登山・ハイキングの安全、撮影他不明写真の位置特定等に有効で、カメラの価値を著しく向上させることができる。
【図面の簡単な説明】
【図１】本発明に係るＧＰＳ機能付カメラの一実施例の回路図である。
【符号の説明】
１　ＧＰＳ機能付カメラ
２　ＧＰＳ部
３　カメラ部
４　ＧＰＳアンテナ
５　ＧＰＳ受信機
６　方位センサ
７　メインコンピュータ
８　データ照写装置
９　カメラシャッタ
１０　フィルム

【図1】


GPS機能付カメラ
1
GPS部
2
カメラ部
3
GPS
アンテナ
4
GPS
受信機
5
方位センサー
6
メイン
コンピュータ
7
データ照写装置
8
カメラシャッタ
9
10
フィルム
N E Ht Dr

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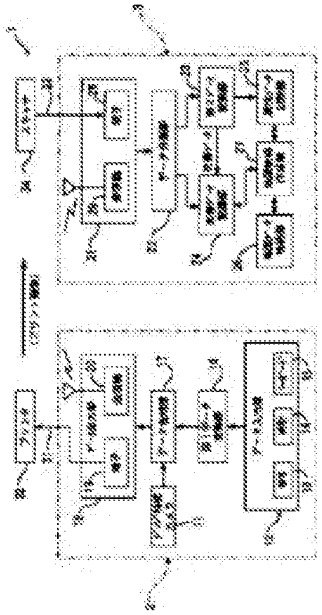
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(72)Inventor : **FUJIYOSHI MAKOTO**
SHIMAMURA SHINJI
HASHIMOTO SHINICHI

(54) METHOD FOR MANAGING PICTURE DATA AND MANAGEMENT DEVICE

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain a management device capable of easily and quickly obtaining photographing information in the case of storing picture data in a data base.
SOLUTION: When a subject is photographed by a camera 11 built in a portable data input terminal equipment 2, the photographed picture data and attribute data related to a photographing position including positional data entered by a GPS receiver 13 are mutually synthesized and the synthesized composite picture data are inputted to a data processor 3. In the data processor 3, a data separation part 22 separates the picture data and the attribute data, stores the picture data and the attribute data in respective recording parts 24, 25 together with the positional data. When the positional data are inputted to a map information preparation part 27, the photographed picture and the attribute data such as photographing information can be displayed on the same screen together with map data around the photographing position.



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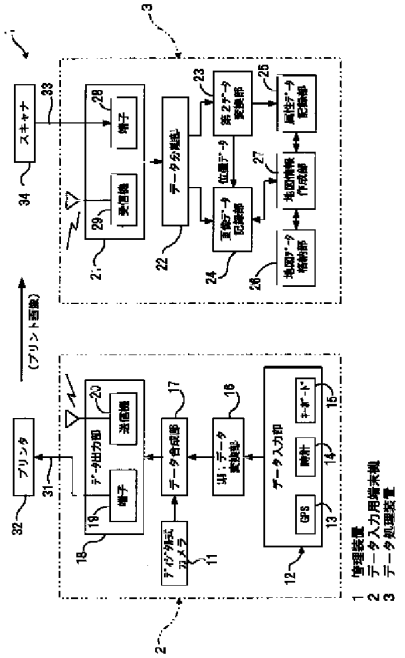
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最終頁に続く

(54)【発明の名称】　画像データ管理方法および管理装置

(57)【要約】
【課題】画像データをデータベース化する際に、撮影情報を容易かつ迅速に入力し得る管理装置を提供する。
【解決手段】携帯式のデータ入力用端末機２に設けられたカメラ１１により、被写体を撮影した際に、この撮影された画像データに、ＧＰＳ受信機１３により取り込まれた位置データを含む撮影場所に関する属性データを合成し、この合成された複合画像データをデータ処理装置３に入力して、データ分離部２２にて、画像データと属性データとに分離するとともに、位置データが一緒にされたこの画像データおよび属性データをそれぞれの記録部２４，２５に蓄積しておき、位置データを地図情報作成部２７に入力することにより、撮影場所付近の地図データとともに、撮影画像および撮影情報などの属性データを同一の画面に表示し得るようにしたもの。



【特許請求の範囲】
【請求項１】データ入力用端末機に設けられた撮影部により撮影を行うとともに、この撮影された画像データに、このデータ入力用端末機にて、撮影に関する属性データを合成し、この属性データが合成された複合画像データをデータ処理装置に入力して、属性データと画像データとに分離した後、属性データおよび画像データを、それぞれの記録部にデータベースとして蓄積することを特徴とする画像データ管理方法。
【請求項２】データ入力用端末機に設けられた撮影部により撮影を行うとともに、この撮影された画像データに、このデータ入力用端末機にて、少なくとも位置データを含む撮影場所に関する属性データを合成し、この属性データが合成された複合画像データを、データ処理装置に入力して、属性データと画像データとに分離した後、属性データおよび画像データを、それぞれの記録部にデータベースとして蓄積し、上記位置データを地図情報作成部に入力して撮影場所に関する地図データを地図データ格納部から取り出すとともに、この地図データに、撮影された画像データおよび属性データを一緒に表示させることを特徴とする画像データ管理方法。
【請求項３】属性データを画像データに合成する際に、バーコードデータに変換して合成させることを特徴とする請求項１または２に記載の画像データ管理方法。
【請求項４】撮影部と、少なくとも位置データを含む撮影場所に関する属性データを入力する属性データ入力部と、上記撮影部で撮影された画像データに上記属性データ入力部からの属性データを合成して複合画像データを得るデータ合成部と、このデータ合成部で得られた複合画像データを出力するデータ出力部とを有するデータ入力用端末機、およびこのデータ入力用端末機から複合画像データを入力するデータ入力部と、このデータ入力部により入力された複合画像データを属性データと画像データとに分離するデータ分離部と、このデータ分離部で分離された属性データを記録する属性データ記録部と、上記データ分離部で分離された画像データを記録する画像データ記録部とを有するデータ処理装置により構成したことを特徴とする画像データ管理装置。
【請求項５】撮影部と、少なくとも位置データを含む撮影場所に関する属性データを入力する属性データ入力部と、上記撮影部で撮影された画像データに上記属性データ入力部からの属性データを合成して複合画像データを得るデータ合成部と、このデータ合成部で得られた複合画像データを出力するデータ出力部とを有するデータ入力用端末機、およびこのデータ入力用端末機から複合画像データを入力するデータ入力部と、このデータ入力部により入力された複合画像データを属性データと画像データとに分離するデータ分離部と、このデータ分離部で分離された属性データを記録する属性データ記録部と、上記データ分離部で分離された画像データを記録する画像データ記録部と、上記位置データを入力して撮影場所に関する地図データを地図データ格納部から取り出すとともに、その画像データおよび属性データを同一画面上で表示させる地図情報作成部とから構成したことを特徴とする画像データ管理装置。
【請求項６】上記データ入力用端末機のデータ出力部から出力された複合画像データを印刷する印刷装置、およびこの印刷装置により印刷された印刷画像を読み取る読取装置を具備し、かつこの読取装置で読み取られた複合画像データを、データ処理装置のデータ入力部に入力するように構成したことを特徴とする請求項４または５に記載の画像データ管理装置。
【請求項７】データ入力用端末機のデータ出力部として無線送信機を使用するとともに、データ処理装置のデータ入力部として上記無線送信機により送信された複合画像データを受信する無線受信機を使用したことを特徴とする請求項４ないし６のいずれかに記載の画像データ管理装置。
【請求項８】データ入力用端末機における属性データ入力部とデータ合成部との間に、属性データ入力部で入力された文字の属性データをバーコードに変換するための第１データ変換部を設けるとともに、データ処理装置におけるデータ分離部と属性データ記録部との間に、バーコードの属性データを文字に変換するための第２データ変換部を設けたことを特徴とする請求項４ないし７のいずれかに記載の画像データ管理装置。
【請求項９】属性データ入力部に、ＧＰＳ受信機を設けたことを特徴とする請求項４ないし８のいずれかに記載の画像データ管理装置。
【発明の詳細な説明】
【０００１】
【発明の属する技術分野】本発明は、撮影画像を撮影場所、撮影時刻などの属性データと一緒に記録し、データベース化して管理を行う画像データ管理方法およびその管理装置に関するものである。
【０００２】
【従来の技術】従来、画像データ、例えば写真などを整理する際、スキャナで読み取り、一旦、コンピュータ装置内に画像を蓄積するとともにファイル化し、併せて、撮影場所、撮影時刻などの属性データを、コンピュータ装置のキーボードから入力していた。また、ディジタル式カメラで写した場合には、その画像データを直接コンピュータに入力するとともに、やはり上記と同様に、撮影場所、撮影時刻などのデータをキーボードから入力していた。
【０００３】
【発明が解決しようとする課題】上述したように、画像データに、撮影場所、撮影時刻などのデータを、キーボードから、撮影画像ごとに入力する必要があり、撮影画像の数が膨大になった場合には、非常に面倒な作業であ

るとともに、入力すべき画像が溜まってしまった場合には、どの場所で、何時、撮影したかを忘れてしまい、正確な撮影情報を入力するのが大変な作業であった。

【０００４】そこで、本発明は、画像データをデータベース化する際に、撮影情報を容易かつ迅速に入力し得る画像データ管理方法および管理装置を提供することを目的とする。

【０００５】

【課題を解決するための手段】上記課題を解決するために、本発明の第１の画像データ管理方法は、データ入力用端末機に設けられた撮影部により撮影を行うとともに、この撮影された画像データに、このデータ入力用端末機にて、撮影に関する属性データを合成し、この属性データが合成された複合画像データをデータ処理装置に入力して、属性データと画像データとに分離した後、属性データおよび画像データを、それぞれの記録部にデータベースとして蓄積する方法である。

【０００６】また、本発明の第２の画像データ管理方法は、データ入力用端末機に設けられた撮影部により撮影を行うとともに、この撮影された画像データに、このデータ入力用端末機にて、少なくとも位置データを含む撮影場所に関する属性データを合成し、この属性データが合成された複合画像データを、データ処理装置に入力して、属性データと画像データとに分離した後、属性データおよび画像データを、それぞれの記録部にデータベースとして蓄積し、上記位置データを地図情報作成部に入力して撮影場所に関する地図データを地図データ格納部から取り出すとともに、この地図データに、撮影された画像データおよび属性データを一緒に表示させる方法である。

【０００７】また、本発明の第１の画像データ管理装置は、撮影部と、少なくとも位置データを含む撮影場所に関する属性データを入力する属性データ入力部と、上記撮影部で撮影された画像データに上記属性データ入力部からの属性データを合成して複合画像データを得るデータ合成部と、このデータ合成部で得られた複合画像データを出力するデータ出力部とを有するデータ入力用端末機、およびこのデータ入力用端末機から複合画像データを入力するデータ入力部と、このデータ入力部により入力された複合画像データを属性データと画像データとに分離するデータ分離部と、このデータ分離部で分離された属性データを記録する属性データ記録部と、上記データ分離部で分離された画像データを記録する画像データ記録部とを有するデータ処理装置により構成したものである。

【０００８】また、本発明の第２の画像データ管理装置は、撮影部と、少なくとも位置データを含む撮影場所に関する属性データを入力する属性データ入力部と、上記撮影部で撮影された画像データに上記属性データ入力部からの属性データを合成して複合画像データを得るデータ合成部と、このデータ合成部で得られた複合画像データを出力するデータ出力部とを有するデータ入力用端末機、およびこのデータ入力用端末機から複合画像データを入力するデータ入力部と、このデータ入力部により入力された複合画像データを属性データと画像データとに分離するデータ分離部と、このデータ分離部で分離された属性データを記録する属性データ記録部と、上記データ分離部で分離された画像データを記録する画像データ記録部と、上記位置データを入力して撮影場所に関する地図データを地図データ格納部から取り出すとともに、その画像データおよび属性データを同一画面上で表示させる地図情報作成部とから構成したものである。

【０００９】上記の各構成によると、入力端末機により、撮影画像と一緒に、この撮影画像に関する属性データを付加するとともに、この属性データが付加された複合画像データを、データ処理装置に入力し、この複合画像データをデータ分離部にて、属性データと元の画像データとに分離した後、この属性データと、位置データを付加した画像データとをそれぞれの記録部に記録し、データベースとして蓄積するようにしたので、例えば画像データをデータベースに蓄積するたびに、過去に撮影した状況を思い出しながら、属性データをキーボードより入力する場合に比べて、データベース化の作業を、非常に容易かつ迅速に行うことができる。さらに、地図情報作成部にて、位置データを入力することにより、各記録部に蓄積された属性データおよび画像データを、撮影場所付近の地図上に表示することができる。

【００１０】

【発明の実施の形態】以下、本発明の実施の形態における画像データの管理方法および管理装置を、図１～図４に基づき説明する。まず、画像データの管理装置について説明する。図１に示すように、この管理装置１は、大きく分けて、携帯式のデータ入力用端末機（ＰＤＡ：パーソナル・デジタル・アシスタントともいい、以下、入力端末機と称す）２と、この入力端末機２で入力された、すなわち撮影被写体、例えば撮影風景の画像データを、データベースとして蓄積するためのデータ処理装置３とから構成されている。

【００１１】上記入力端末機２は、ＣＣＤなどを有するディジタル式カメラ（撮影部）１１と、撮影に関する付加的なデータとして、撮影場所を示す位置データ、撮影日時などの撮影時刻および撮影対象物の名称などを示す説明文（以下、これらを属性データともいう）をそれぞれ入力するためのＧＰＳ受信機１３、時計１４およびキーボード（文字入力装置）１５からなるデータ入力部１２と、これらのＧＰＳ受信機１３、時計１４およびキーボード１５で入力された属性データを受け取るとともに、これらの属性データをバーコードに変換するための第１データ変換部１６と、上記ディジタル式カメラ１１からの画像データおよび上記各バーコードを入力して、

画像データにバーコードデータを合成して複合画像データを得るためのデータ合成部（コーダともいう）１７と、このデータ合成部１７からの複合画像データを外部に出力するためのデータ出力部１８とから構成されている。このデータ出力部１８には、複合画像データをディジタル信号として出力する出力端子１９および電波として発信する無線送信機２０が設けられている。

【００１２】上記データ処理装置３には、データ入力端末機２から複合画像データを入力するデータ入力部２１と、このデータ入力部２１で入力された複合画像データを画像データとバーコードデータとに分離するデータ分離部２２と、このデータ分離部２２で分離されたバーコードデータを入力して元の属性データに復元するための第２データ変換部（デコーダともいう）２３と、上記データ分離部２２で分離された画像データを入力するとともに第２データ変換部２３で復元された属性データの内位置データを入力して一緒に記録しデータベースとして蓄積する画像データ記録部（画像データベース部）２４と、この第２データ変換部２３で復元された属性データを記録しデータベースとして蓄積する属性データ記録部（属性データベース部）２５と、属性データの内少なくとも位置データを入力することにより、位置データ付近すなわち撮影場所付近の地図データを地図データ格納部（地図データベース部）２６から取り出し、かつこの位置データに一致する位置データが一緒に記録された画像データを上記画像データ記録部２４から取り出すとともに同じく同一の位置データを有する属性データを上記属性データ記録部２５から取り出し、これら各データを同一表示画面上に表示させる地図情報作成部［地図情報システム（ＧＩＳ）ともいう］２７とが具備されている。なお、この地図情報作成部２７において、ＧＰＳにおける測地系と地図データ格納部２６に蓄積されている測地系とが異なる場合には、ＧＰＳによる位置データが地図データ格納部２６側の測地系に変換される。

【００１３】そして、さらに上記入力端末機２とデータ処理装置３との間には、入力端末機２で得られた複合画像データを、印刷物（プリント画像）を介して、データ処理装置３側に受け渡すことができるように、入力端末機２におけるデータ出力部１８の出力端子１９に接続ケーブル３１を介して接続されてその複合画像データを印刷するディジタル式プリンタ（印刷装置）３２およびこのプリンタ３２で印刷された印刷物を読み込みディジタルデータとして接続ケーブル３３を介して出力するスキャナ（読取装置）３４が具備されている。

【００１４】上記データ入力部２１としては、上記スキャナ３４からの複合画像データを入力するための入力端子２８、および入力端末機２の無線送信機２０からの電波を受信するための無線受信機２９から構成されている。勿論、スキャナ３４からの接続ケーブル３３は上記入力端子２８に接続される。ここで、上記管理装置１の具体的な構成について説明する。

【００１５】すなわち、図２に示すように、入力端末器２としては、液晶表示部１１ａを有するＣＣＤカメラなどのディジタル式カメラ１１に、ＧＰＳ受信機１３と無線送信機２０とが一体的に組み合わされるとともに、文字入力用のキーボード１５も一緒に設けられ、また上記所定の信号処理を行うための演算処理部（図示せず）が具備され、この演算処理部からのデータ信号がプリンタ３２に出力されるか、または無線送信機２０から送信される。

【００１６】また、データ処理装置３としては、パーソナルコンピュータ装置４１が使用されるとともに、データ記録用の外部記憶装置４２が具備され、勿論、このパーソナルコンピュータ装置４１に、無線受信機２９およびスキャナ３４が接続される。次に、上記管理装置１により、撮影画像をデータベース化する作業について説明する。

【００１７】まず、入力端末機２のディジタル式カメラ１１により、例えば名所旧跡を撮影する。この時、撮影者のボタン操作により、このカメラに一体的に設けられているＧＰＳ受信機１３および時計１４からその撮影場所の緯度・経度の位置データおよび日時の時刻データがメモリ部に記憶され、また必要に応じて、撮影者がキーボード１５から撮影場所の名称、その他の情報を文字入力してメモリ部に記憶させる。勿論、位置データおよび時刻データを、撮影と同時に、自動的にメモリ部に記憶させることもできる。

【００１８】次に、撮影者の操作により、これらの属性データが第１データ変換部１６に送られ、ここでバーコードデータに変換される。そして、このバーコードデータおよびカメラ１１からの画像データが、データ合成部１７に入力されて、図３に示すような複合画像データＡが得られる。このような手順を繰り返し、各場所で撮影を行う。

【００１９】撮影が終了すると、撮影者は、所定の作業場所（仕事場、自宅など）に戻り、入力端末機２におけるデータ出力部１８の出力端子１９に接続ケーブル３１を介してプリンタ３２を接続し、必要な複合画像データを印刷物（プリント画像）としてそれぞれ出力する。次に、この印刷物に基づき、撮影画像をデータ処理装置３に登録する。

【００２０】すなわち、スキャナ３４をデータ処理装置３におけるデータ入力部２１の入力端子２８に接続ケーブル３３を介して接続しておき、上記印刷物をスキャナ３４にて読み取る。この読み取られた複合画像データは、データ入力部２１を経てデータ分離部２２に送られる。なお、複合画像データＡを、印刷物を媒介として、入力端末機２からデータ処理装置３に送る他に、入力端末機２におけるデータ出力部１８の無線送信機２０から、複合画像データを、直接、データ処理装置３におけ

るデータ入力部２１の無線受信機２９に送るようにしてもよい。場合によっては、フロッピィディスクなどの記録媒体により、複合画像データの受け渡しを行うこともできる。

【００２１】上記データ分離部２２に送られた複合画像データは、バーコードデータとしての属性データと画像データとに分離され、属性データについては第２データ変換部２３でバーコードデータから文字データに復元された後、属性データ記録部２５に記録され、画像データについては位置データとともに画像データ記録部２４に記録されてデータベースとして蓄積される。すなわち、これらの画像データおよび属性データには、撮影場所の位置データが含まれていることになり、位置データに基づき、互いの関連するデータを呼び出すことができる。

【００２２】したがって、地図情報作成部２７において、位置データが入力されると、この位置データに基づき、上記属性データ記録部２５から、その位置で撮影された撮影情報に関する属性データが取り出されるとともに、画像データ記録部２４からその位置で撮影された画像データが取り出され、さらにこの位置データに基づき、地図データ格納部２６に格納されている地図データの中から、撮影場所付近の地図データが取り出され、その表示画面に、図４に示すように、撮影場所付近の地図、撮影場所などの撮影情報（記録されている場合には、撮影時刻、撮影場所に関する文字情報も含まれる）および撮影した画像が一緒に表示される。

【００２３】このように、入力端末機２により、撮影画像と一緒に、この撮影画像に関する属性データを付加するとともに、この属性データが付加された複合画像データを、データ処理装置３に入力し、この複合画像データをデータ分離部２２にて、属性データと元の画像データとに分離した後、この属性データと、位置データを付加した画像データとをそれぞれの記録部２５，２４に記録し、データベースとして蓄積するようにしたので、従来のように、画像データをデータベースに蓄積するたびに、過去に撮影した状況を思い出しながら、属性データをキーボードより入力する場合に比べて、データベース化の作業を、非常に容易かつ迅速に行うことができる。しかも、地図情報作成部２７にて、位置データを入力することにより、各記録部２４，２５に蓄積された画像データおよび属性データを、撮影場所付近の地図上に表示するようにしたので、容易かつ迅速に、所望の画像を属性情報とともに画面上に呼び出すことができ、非常に便利である。

【００２４】

【発明の効果】以上のように本発明の画像データの管理方法および管理装置の構成によると、入力端末機により、撮影画像と一緒に、この撮影画像に関する属性データを付加するとともに、この属性データが付加された複合画像データを、データ処理装置に入力し、この複合画像データをデータ分離部にて、属性データと元の画像データとに分離した後、この属性データと、位置データを付加した画像データとをそれぞれの記録部に記録し、データベースとして蓄積するようにしたので、従来のように、画像データをデータベースに蓄積するたびに、過去に撮影した状況を思い出しながら、属性データをキーボードより入力する場合に比べて、データベース化の作業を、非常に容易かつ迅速に行うことができる。

【００２５】さらに、地図情報作成部にて、位置データを入力することにより、各記録部に蓄積された属性データおよび画像データを、撮影場所付近の地図上に表示するようにしたので、容易かつ迅速に、所望の画像を属性情報とともに画面上に呼び出すことができ、非常に便利である。

【図面の簡単な説明】

【図１】本発明の実施の形態における画像データ管理装置の概略構成を示すブロック図である。

【図２】同管理装置の具体的構成を示す図である。

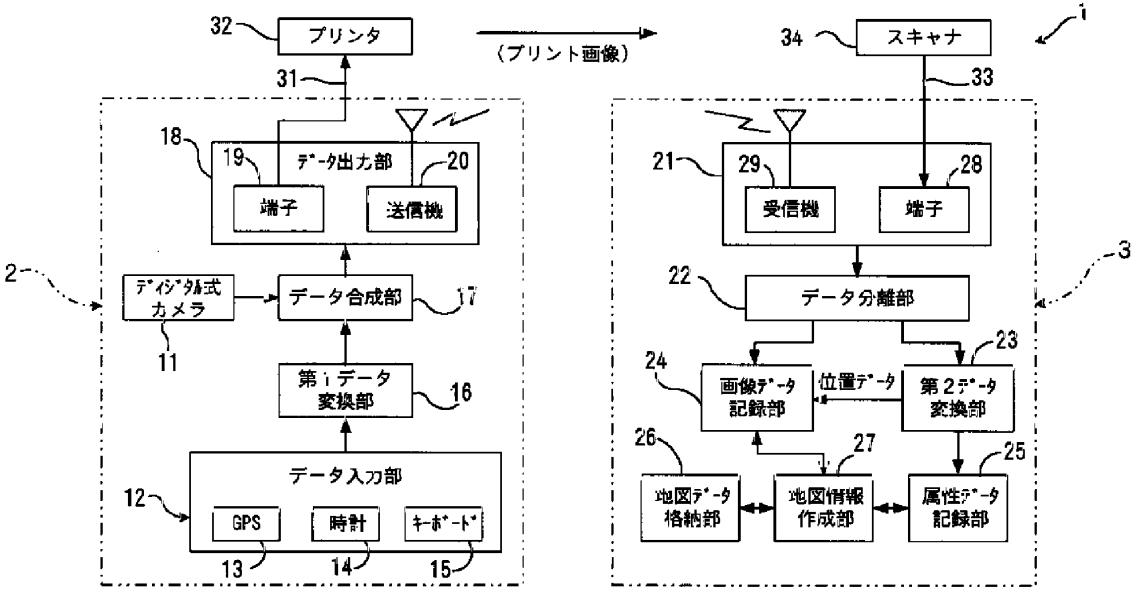
【図３】同管理装置における複合画像データをプリントアウトした図である。

【図４】同管理装置の地図情報作成部にて表示し得る地図情報の図である。

【符号の説明】

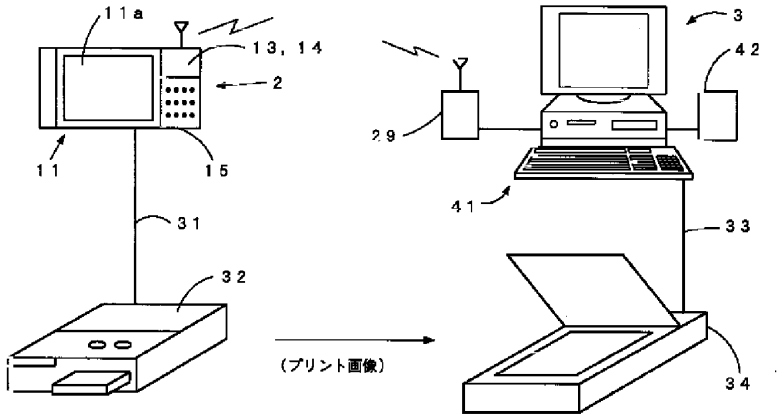
１　管理装置
２　データ入力用端末機
３　データ処理装置
１１　ディジタル式カメラ
１２　データ入力部
１３　ＧＰＳ受信機
１４　時計
１５　キーボード
１６　第１データ変換部
１７　データ合成部
１８　データ出力部
２０　無線送信機
２１　データ入力部
２２　データ分離部
２３　第２データ変換部
２４　画像データ記録部
２５　属性データ記録部
２６　地図情報作成部
２７　地図データ格納部
２９　無線受信部
３２　プリンタ
３４　スキャナ

【図1】

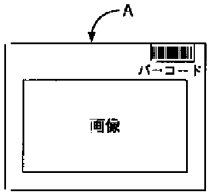


1　管理装置
2　データ入力用端末機
3　データ処理装置

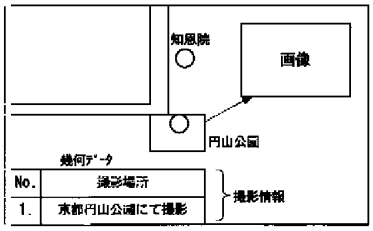
【図2】



【図3】



【図4】



フロントページの続き

(51)Int.Cl.[7]	識別記号	FI	(参考)
		G06F 15/62	335

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5B050 AA10 BA10 BA11 BA17 CA05 DA06 EA19 EA20 FA02 FA03 GA08
5B075 ND06 NK02 NK13 PP02 PP05 PP22 PQ02 PQ29 PQ32 PQ40
5C082 AA27 AA32 BA14 BA20 BB01 CB01 CB06 DA87 DA89 MM02 MM09

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

H04B 7/26(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC8 H04B 7/26, G01S 5/14, H04N 1/21, 5/232

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

KOREAN PATENTS AND APPLICATIONS FOR INVENTIONS SINCE 1975
KOREAN UTILITY MODELS AND APPLICATIONS FOR UTILITY MODELS SINCE 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS, DELPHION, ESPACENET & Keywords : location, GPS, CPS, camera, image, map, navigation and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,437,797 B1 (Ota) 20 August 2002 * abstract, Col. 5 line 37 - line 60, figure 9 *	1-23
X	US2002-101619 A1 (Tsubaki et al.) 1 August 2002 * abstract, paragraphs [0138]-[0146], figure 11 *	1-23
A	JP1994-261244 A (TAMRON CO., LTD.) 16 September 1994 * abstract, paragraphs [0006]-[0009], figure 1 *	1-23

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
25 JULY 2006 (25.07.2006)	**25 JULY 2006 (25.07.2006)**

Name and mailing address of the ISA/KR	Authorized officer
Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	KIM, Sang Woo Telephone No. 82-42-481-8324

Form PCT/ISA/210 (second sheet) (April 2005)

Electronic Patent Application Fee Transmittal	
Application Number:	11911879
Filing Date:	27-Mar-2008
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Filer:	Yoon Ham/james rhee
Attorney Docket Number:	4900-0009
Filed as Large Entity	

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt

EFS ID:	9227297
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/james rhee
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	13-JAN-2011
Filing Date:	27-MAR-2008
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Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$180
RAM confirmation Number	3443
Deposit Account	071337
Authorized User	HAM,YOON S
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. 1.492 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		110113_0009_amendment.pdf	56573 f8c876c01015627c1056f4161ea813954dd30b32	yes	8
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	8	
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Filed (SB/08)	110113_0009_IDS.pdf	612665 0f9f745d99ee265a3661f9e19aa15470a0ca4b9e	no	4
Warnings:					
Information:					
3	Foreign Reference	1.pdf	70488 98268dec858c30f610e3de79a9110f7dff6991de	no	4
Warnings:					
Information:					
4	Foreign Reference	2.pdf	133823 dc7904ea0adbf33fa5a5fe104f0f4e0fe0c1d951	no	4
Warnings:					
Information:					
5	Foreign Reference	3.pdf	437532 73df7fe7e3bdc9bef51cd3bc460fb7a57daed856	no	8
Warnings:					
Information:					
6	Foreign Reference	4.pdf	31820 4a70f1bd9c42c25092d61e38eea7d618af78ab68	no	1
Warnings:					
Information:					
7	Fee Worksheet (PTO-875)	fee-info.pdf	29954 e19c34a14f017588e772590c81b036065bb14b0a	no	2

Warnings:	
Information:	
Total Files Size (in bytes):	1372855

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Attorney Docket No. 4900-0009

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Jin-Seung CHOI et al.	:	Confirmation No.: 2595
	:	
U.S. Patent Application No.: 11/911,879	:	Group Art Unit: 2617
	:	
Filed: March 27, 2008	:	Examiner: Kuo-Kong Woo

For: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Dear Examiner:

In response to the Office Action dated October 13, 2010, please amend the above-identified application as follows:

- **Amendments to the Claims** with a complete claim listing; and
- **Remarks**.

IN THE CLAIMS

Please amend the claims as follows:

1. (**Currently Amended**) A location-based service method using image data provided ~~using~~ by a terminal equipped with a camera, and using location data ~~including a~~ that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined ~~location and~~location;

(b) a step of receiving ~~the location~~location data of the predetermined location;

(c) a step of inserting the received location data and the first image data into a ~~into the first image data and generating~~ second image data; and

(d) a step of ~~displaying the image corresponding to the first image data and~~ transmitting the second image data to a remote user and providing a location-based service to the remote user using the location data~~, when~~ of the second image data ~~are selected~~.

2. (Original) The location-based service method according to claim 1, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. (**Currently Amended**) The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. (Original) The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

6. (Previously Presented) The location-based service method according to claim 1, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1) a step of selecting the guiding service;

(d2) a step of transmitting the service request signal and the location data to a navigation system; and

(d3) a step wherein the navigation system provides the navigation data corresponding to the location data.

7. (**Currently Amended**) The location-based service method according to claim 6, ~~wherein the~~wherein current location data of the terminal ~~are further~~is transmitted to the navigation system in the step (d2).

8. (Original) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, the traffic information and the turnaround time.

9. (Previously Presented) The location-based service method according to claim 1, wherein the location data are provided by the location data providing system.

10. (**Currently Amended**) The location-based service method according to claim 9, wherein the location data providing system ~~provides~~ is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. (**Currently Amended**) The location-based service method according to claim 9, wherein the location data providing system ~~provides~~ is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. (Previously Presented) The location-based service method according to claim 1, wherein the location data includes the information on the latitude and the longitude of the terminal or the base station.

13. (Previously Presented) The location-based service method according to claim 1, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (**Currently Amended**) The location-based service method according to claim 13, wherein the digital camera includes a module ~~which can receive~~for receiving the location data.

15. (**Currently Amended**) A terminal ~~which is~~ equipped with a camera, the terminal ~~and can receive the~~configured to receive location data, comprising:

a camera section for generating the first image data at a predetermined location;

a location data processing section for inserting the location data ~~of the terminal into~~and the first image data ~~and generating the~~ into a second image data; and

an image data storing section for receiving and storing the second image data; and

a transmitting section for transmitting the second image data to a remote user, so that a location-based service is provided to the remote user using the location data of the second image data.

16. (**Currently Amended**) The terminal according to claim 15, comprising ~~the digital~~ a digital camera ~~which can~~configured to receive the location data.

17. (**Currently Amended**) The terminal according to claim 15, further comprising a compression controller for compressing the second image data and transmitting the ~~same~~ second image data to the image data storing section.

18. (**Currently Amended**) The terminal according to claim 15, wherein the location data ~~are provided~~is provided by a ~~by the~~ location data providing system using ~~the base~~a base station or ~~the satellite~~a satellite.

19. (**Currently Amended**) The terminal according to claim 18, wherein the location data providing system is configured to provide~~provides~~ the location data ~~through the~~through a Cell Positioning System (CPS).

20. (**Currently Amended**) The terminal according to claim 18, wherein the location data providing system ~~provides~~ is configured to provide the location data ~~through the~~through a Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. (**Currently Amended**) The location-based service ~~system~~ method according to claim 1, ~~comprising the terminal according to claim 1,~~ further comprising:

the terminal;

~~the location~~a location data providing system for providing the location data of the terminal; and

a service system for providing a service according to the remote user's selection based on the location data.

23. (**Currently Amended**) The location-based service system according to ~~claim 21~~claim 22, wherein the service system is a map providing system or a navigation system.

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks are respectfully requested.

Claims 1-23 are pending in this application. By this Amendment, claims 1, 3, 7, 10-11, 14-20 and 22 are amended.

Claim Rejections Under 35 USC §102(b)

Claims 1-7, 9, 11-18 and 20-23 stand rejected under 102(b) as being anticipated by Tsubaki et al. (US 2002/010619).

A rejection based on 35 U.S.C. §102 and a patent's description cannot exist unless every element of the claim is described in the reference, either directly or inherently.

As amended, claim 1 recites, *inter alia*, "a step of transmitting the second image data to a remote user and providing a location-based service to the remote user using the location data of the second image data." Tsubaki does not disclose, teach, or suggest this feature.

At best Tsubaki discloses storing location information along with image data in a digital camera, saving the image file to a memory card (see Fig. 20, step S138). Nowhere does Tsubaki disclose, teach, or suggest "a step of transmitting the second image data to a remote user and providing a location-based service to the remote user using the location data of the second image data," as recited in amended claim 1. Furthermore, nowhere does Tsabaki suggest using the second data image in a location-based service.

Accordingly, because Tsubaki does not disclose, teach or suggest each and every feature recited in amended claim 1, Applicants' recited feature distinguishes the claimed apparatus and method over Tsubaki and therefore the rejection of claim 1 under 35 U.S.C. §102(b) is improper. Applicants respectfully submit, therefore, that independent claim 1 is patentable over Tsubaki.

Claim 15 recites an apparatus based upon the method of amended claim 1, and is likewise patentable over Tsubaki for reciting "a transmitting section for transmitting the second image data to a remote user, so that a location-based service is provided to the remote user using the location data of the second image data."

Claims 2-7, 11-18 and 20-23 depend variously from independent claims 1 and 15 and are likewise patentable over Tsubaki at least for their dependence on an allowable base claim, as well as for additional feature(s) each recites. Withdrawal of the rejection over Tsubaki is respectfully requested.

Claim Rejections Under 35 USC §103(a)

Claims 8, 10, and 19 stand rejected under 35 U.S.C. §103(a) over Tsubaki in view of on eor more of Walker et al. (US 6,199,014) and Banno (US 2002/0049064).

Whether or not the claimed subject matter would have been obvious at the time of invention to one of ordinary skill in the art is a question of law based on underlying facts. *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1348, 53 USPQ2d 1580 (Fed. Cir. 2000). The relevant factual inquiries include the following factors:

> (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations…. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966).

Here, factual questions and the ultimate legal conclusion are in dispute.

Applicants respectfully submit that neither Walker nor Banno remedies the deficiencies of Tsubaki in regards to either a step or transmitting section for transmitting the second image data to a remote user and providing a location-based service to the remote user using the location data of the second image data, as recited in amended claims 1 and 15. Therefore, claims 8, 10, and 19 are likewise patentable over the asserted combination of references at least in view of their dependence on either claim 1 or claim 15. Withdrawal of the rejection is respectfully requested.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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YSM/ERM/jr

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/911,879	Filing Date 03/27/2008	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☐		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	01/13/2011	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $ =		OR	X $52=	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $220=	0
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DALE HALL/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 04/01/2011

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
04/01/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/911,879	CHOI ET AL.	
	Examiner	Art Unit	
	KUO WOO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) filed on 1/13/2011 has been considered.

Response to Amendment

2. This action is response to the communication filed on 1/13/2011.

3. Claims 1-23 are pending in this action. Claims 1, 3, 7, 10-11, 14-20 and 22 have been amended.

4. Applicant's arguments filed 1/13/2011 have been fully considered but are moot in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims1, 15 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 15 claim transmitting **the second image data to a remote user and providing a location based service to the remote user**" and claim 22 claims " according to the **remote** user's selection" which

both were not supported by specification. Specification discloses (¶30:1-3 which recite transmits the second image data to another terminal) their no remote user is included in the speciation.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims1-7, 9, 11-18 and 20-23 are rejected under 35 U.S.C. 103(a) as obvious over Tsubaki et al (US PGPub 2002/0101619 A1).

Regarding claims 1 and 15, Tsubaki discloses "(a) a step of generating first image data with the terminal at a predetermined location" (¶24, which recite predetermined location to be photographed which digital camera displays the subject information on the subject to be photographed, so that before photographing, thereby enabling the subject to be confirmed on the basis of the displayed subject information.);

"(b) A step of receiving the location data" (¶41, which recite if required additional information of location of the subject as in the case with GPS information);

"(c) A step of inserting the received location data into the first image data and generating second image data" (¶24, which recite the additional location information is added to first image that the photographed image of the subject has his or her identification information recorded thereon in connection therewith);

"d) A step of transmitting the second image data to a remote user and providing a location–based service to the remote user using the location data of the second image data (¶143, which recite all these pieces of information (second image data being read out from the map database on the basis of the GPS information) and (¶72, which recite second image data transmits to the digital camera together with patient ID). Although. Tsubaki invention is target for medical use along with locational information and other data. The scope of invention is combining location information of first image with added on information is the similar invention.

Based on Figure 1, the transmitting from camera to PC, Laptop or database site are two ways communication. Camera is able to receiver additional information (second image data) from other terminal (remote user). It would have been obvious to that skill in the art to understand communicated with other user is remote user. Therefore any added on information to the first image is considering as second or third image data. Camera terminal as Tsubaki claimed herewith is able to receive and transmit from remote terminal as remote user.

Regarding claims 2 and16, Tsubaki discloses "a step of compressing and storing the second image data, after the step (c)" (¶26, which recite retrieve stored location information that from the database having the subject information already stored in connection with the subject identification information, and transmitting the subject information read from the database, to the digital camera together with the identification information read from the recording medium).

Regarding claims 3 and 17, Tsubaki discloses "(d1) a step of selecting the map providing service" (¶174, which recite location information can be selected from map database that the GPS information obtained, the car navigation apparatus obtains a place name corresponding to the GPS information, from the map database 510 as text information.);

"(d2) a step of transmitting a service request signal (¶173, which recite request map information from digital camera from the car navigation apparatus 500 (step S114) and the location data to a map providing system" (¶174 which recite map information from database that the car navigation apparatus obtains a place name corresponding to the GPS information, from the map database 510 as text information);

"(d3) a step wherein the map providing system provides a map corresponding to the location data" (¶174 , which recite map corresponding location data is transmitted to digital camera that the car navigation apparatus uses this text information as a display information, that is, the place name, to generate location information containing the GPS information as added-to-image information (step S156). The thus generated location information is transmitted to the digital camera 400).

Regarding claims 4 and22, Tsubaki discloses "wherein the map includes at least one of geographical information, traffic information (¶157, which recite traffic condition of vehicle that while displaying, on the map, a mark or the like which is indicative of the current location of the vehicle.), administrative district information, and information including the latitude and the longitude of the location data." (¶157, which recite that,

reads out the map information from the map database 510 on the basis of GPS information such as the current latitude, longitude).

Regarding claim 5, Tsubaki discloses “the step of selecting a type of the map, after the step (d1)” (¶155, which recite one of map for name of place and tourist information map that a map database 510 such as a CD-ROM which has map information recorded thereon and including image information such as maps and text information such as the names of places and tourist information,).

Regarding claims 6 and 23, Tsubaki discloses “a step of selecting the guiding service” (¶155, which recite one of map for name of place and tourist (guiding service) ;

“(d2) a step of transmitting the service request signal and the location data to a navigation system” (¶174, which recite that on the basis of the GPS information obtained, the car navigation apparatus obtains a place name corresponding to the GPS information, from the map database 510 as text information);

“(d3) a step wherein the navigation system provides the navigation data corresponding to the location data” (¶174, which recite the navigation system using map information that The car navigation apparatus uses this text information as a display information, that is, the place name, to generate location information containing the GPS information as added-to-image information (step S156).

Regarding claim 7, Tsubaki discloses “wherein the current location data of the terminal are further transmitted to the navigation system in the step (d2)” (¶174, which recite that current location information is transmitted to the digital camera 400 (step S158) wherein also collocated with GPS navigation system).

Regarding claims 9, 11, 18 and 20-21, Tsubaki discloses “wherein the location data (¶13, which recite GPS provided location information that a large number of cameras have been proposed which record GPS information such as latitude and longitude which is measured using a GPS (Global Positioning System) together with the photographed image) are provided by the location data providing system”.

Regarding claim 12, Tsubaki discloses “wherein the location data includes the information on the latitude and the longitude of the terminal or the base station (¶13 which recite that a large number of cameras have been proposed which record GPS Information such as latitude and longitude which is measured using a GPS (Global Positioning System) together with the photographed image).

Regarding claim 13, Tsubaki discloses “wherein the terminal equipped with the (Abstract, which recite the terminal can be transceiver with digital camera and GPS that Further, the digital camera obtains location information from a car navigation apparatus. The location information is classified into added-to-image information added to the subject image (GPS information indicative of latitude, longitude, and altitude) and display information associated with the added-to-image information (the place name corresponding to the GPS information)) includes a camera phone or a digital camera.”

Regarding claim 14 Tsubaki discloses” wherein the digital camera includes a module which can receive the location data” (Abstract, which recite terminal subsequently, after photographing has been completed, the added-to-image information (GPS information) of the location information stored in the non-volatile memory in connection with the image).

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubaki as applied to claims 1-7 above, and further in view of Walker et al. (US PAT 6,199,014).

Regarding claim 8, Tsubaki discloses “traffic information of vehicle current information. However, Tsubaki does not explicitly disclose “wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, and the turnaround time”.

In an analogous art, Walker discloses (Abstract, which recite system provide the starting and destination points, geographic information and photographic information are processed to determine a route for travel to the destination point. Navigational instructions for traveling the route are generated, including representations of photographs) and (Col. 1, Lines 9, which recite shortest route and turnaround time can be customized that computerized navigation systems are now available which enable a traveler to follow a customized route to his destination).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsubaki teaching in location information insert with image and in combination of Walker provides customized route information that navigational instructions and the photographic representations of geographic locations are outputted in a sequence, thereby providing a sequence of directions and photographic representations of geographic locations along the route. (See Abstract).

9. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubaki as applied to claims 1-7 above, and further in view of Banno (US PGPub 2002/0049064 A1).

Regarding claims 10 and19, Tsubaki discloses Location information by GPS system. However, Tsubaki does not explicitly disclose “wherein the location data providing system provides the location data of the terminal using a Cell Positioning System (CPS)”.

In an analogous art, Banno discloses (¶10 which recite Cell Position system for mobile terminal based on the position information acquired by the first and second acquisition means and the position information input for the target position, calculates the angle formed between a line joining the current position and a base station and a line joining the current position and the target position, a first locating means, which, based on a received level of a signal transmitted from the base station, locates the direction to the location of the base station, and a second locating means, which, based on the direction located by the first locating means and the angle calculated by the calculation means, locates the direction to the target position)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsubaki teaching in location information insert with image and in combination of Banno provides acquires position information of a base station having a stored position, a second acquisition means, which acquires position information for a current position, a calculation means, which, based on the position

information acquired by the first acquisition and joining the current position and the base station (See Abstract).

Remarks

10. Applicant argues prior art Tsubaki fails to disclose newly amended "a step of transmitting the second image data to a remote user using location data of the second image data".

The examiner respectfully disagrees. In response to applicant's argument, For seek of promptly explanations, Figure 1, Camera terminal (300 shot pictures and sent through RF signal to PC, laptop and medical database station which all consider as remote terminals and person other than who took the pictures are remote user.

In Abstract which recite the digital camera obtains locational information (GPS information) is added to image information. And further recite if additional information (a second image data) input from an external device is recorded in connection with the image (a first image data). In both statements, clearly read on newly added elements

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617

Notice of References Cited	Application/Control No. 11/911,879	Applicant(s)/Patent Under Reexamination CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,199,014 B1	03-2001	Walker et al.	701/211
*	B	US-2002/0049064 A1	04-2002	Banno, Satoshi	455/456
*	C	US-2002/0101619 A1	08-2002	Tsubaki et al.	358/302
*	D	US-6,437,797 B1	08-2002	Ota, Yoshinori	345/638
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/05/2010	03/24/2011							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	✓							
	10	✓	✓							
	11	✓	✓							
	12	✓	✓							
	13	✓	✓							
	14	✓	✓							
	15	✓	✓							
	16	✓	✓							
	17	✓	✓							
	18	✓	✓							
	19	✓	✓							
	20	✓	✓							
	21	✓	✓							
	22	✓	✓							
	23	✓	✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010,3/23/2011	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010	KW
PCT search	10/4/2010,3/23/2011	KW

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

/KUO WOO/ Examiner.Art Unit 2617	

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	11911879
Filing Date	2008-03-27
First Named Inventor	Jin-Seung CHOI et al.
Art Unit	2617
Examiner Name	Kuo-Kong Woo
Attorney Docket Number	4900-0009

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6437797		2002-08-20	FUJI PHOTO FILM CO., LTD.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020101619		2002-08-01	HISAYOSHI TSUBAKI ET AL.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	06-261244	JP		1994-09-16	TAMRON CO LTD		☐
	2	2000-235580	JP		2000-08-29	HITACHI ZOSEN CORP		☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	11911879
	Filing Date	2008-03-27
	First Named Inventor	Jin-Seung CHOI et al.
	Art Unit	2617
	Examiner Name	Kuo-Kong Woo
	Attorney Docket Number	4900-0009

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Korea Office Action for application no. 10-2005-0032452, citing the above reference(s).	☐
	2	International Search Report for application no. PCT/KR2006/001444, citing the above reference(s).	☐

If you wish to add additional non-patent literature document citation information please click the Add button [Add]

EXAMINER SIGNATURE

Examiner Signature	/Kuo-kong Woo/	Date Considered	03/23/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.W./

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Application Number	:	11/911,879	Confirmation No. 2595
Applicant	:	Jin-Seung CHOI et al.	
Filed	:	March 27, 2008	
Tech Cntr/AU	:	2617	
Examiner	:	Woo, Kuo-Kong	
Entitled	:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	
Attorney Reference	:	4900-0009	
Customer Number	:	22429	

AMENDMENT UNDER 37 C.F.R. §1.116

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

The present Amendment is being filed to address the issues raised in the Final Official Action mailed April 1, 2011.

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (**Currently amended**) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location;

(b) a step of receiving location data of the predetermined location;

(c) a step of inserting the received location data [[and]]into the first image data [[into]]to generate a second image data; and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to ~~a remote user~~ another terminal and providing a location-based service to the ~~remote user~~ the another terminal using the location data of the second image data.

2. (Original) The location-based service method according to claim 1, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. (Previously presented) The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative

district information, and information including the latitude and the longitude of the location data.

5. (Original) The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

6. (**Currently amended**) The location-based service method according to claim 1, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1) a step of selecting the guiding service;

(d2) a step of transmitting [[the]]a service request signal and the location data to a navigation system; and

(d3) a step wherein the navigation system provides [[the]]a navigation data corresponding to the location data.

7. (Previously presented) The location-based service method according to claim 6, wherein current location data of the terminal is transmitted to the navigation system in the step (d2).

8. (**Currently amended**) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, [[the]] traffic information and [[the]] turnaround time.

9. (**Currently amended**) The location-based service method according to claim 1, wherein the location data are provided by [[the]]a location data providing system.

10. (Previously presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. (Previously presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. (**Currently amended**) The location-based service method according to claim 1, wherein the location data includes [[the]] information on [[the]] latitude and [[the]] longitude of the terminal or [[the]] base station.

13. (Previously presented) The location-based service method according to claim 1, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (Previously presented) The location-based service method according to claim 13, wherein the digital camera includes a module for receiving the location data.

15. (**Currently amended**) A terminal ~~equipped with a camera~~, the terminal configured to receive location data, comprising:

a camera section for generating [[the]]a first image data at a predetermined location;

a location data processing section for inserting the location data [[and]]into the first image data [[into]]to generate a second image data; and

an image data storing section for receiving and storing the second image data; and

a transmitting section for transmitting the second image data, the second image data including the first image data and the location data, to ~~a remote user~~ another terminal, so that a location-based service is provided to the ~~remote user~~ another terminal using the location data of the second image data.

16. (**Currently amended**) The terminal according to claim 15, ~~comprising a digital~~ the camera is configured to receive the location data.

17. (Presently presented) The terminal according to claim 15, further comprising a compression controller for compressing the second image data and transmitting the second image data to the image data storing section.

18. (Presently presented) The terminal according to claim 15, wherein the location data is provided by a location data providing system using a base station or a satellite.

19. (Presently presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

20. (Presently presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. (**Currently amended**) The location-based service system performing the method according to claim 1, further comprising:

the terminal;

a location data providing system for providing the location data of the terminal; and

a service system for providing a service according to ~~the remote~~ a user's selection based on the location data.

23. (Previously presented) The location-based service system according to claim 22, wherein the service system is a map providing system or a navigation system.

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks are respectfully requested.

Claim Status/Amendment

Claims 1 and 15 have been amended to better define the claimed invention. Claims 1, 6, 8, 9, 12, 15, 16, and 22 have been amended to improve claim language. All amended claims are supported by the original specification and drawings. In detail, the amendments to claims 1 and 15 are supported at least by paragraphs [0029]-[0030]. No new matter has been introduced by the foregoing amendments. Claims 1-23 are pending in the application.

Claim Rejection under 35 U.S.C. §112

Claims 1, 15, and 22 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description. In response, claims 1, 15, and 22 have been amended to delete "***remote user***," as attached. Accordingly, withdrawal of this rejection is respectfully requested by the preceding amendments.

Claim Rejections under 35 U.S.C. §103

1. Claims 1-7, 9, 11-18, and 20-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tsubaki (U.S. Patent Publication No. 2002/0101619 A1). This rejection is respectfully traversed for the reasons set forth below.

Amended claim 1 recites, *inter alia*, a feature of "A location-based service method ... comprising ... (d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal." Tsubaki fails to show or suggest at least this feature.

In the Office Action, the Examiner alleged that Tsubaki at paragraphs [0072] and [0143] discloses the above feature of claim 1 (see page 4, lines 1-5). Applicant, however, disagrees with the Examiner for the following reasons.

Tsubaki at paragraph [0072] discloses that "T(t)he computer 12 reads out ... patient information such as a photograph ... which is used to confirm the patient based on the patient ID ... transmits the patient information to the digital camera 30 by radio communication together with the patient ID." In view of the above disclosure, in Tsubaki, the photograph is transmitted together with the patient ID, ***not with the location information***. The location information differs from the patient ID because the patient ID is used to confirm the patient while the location data indicates the predetermined location at which the image is pictured. In contrast, in amended claim 1, the first image data is transmitted together ***with the location data*** to another terminal. Thus, contrary to the Examiner's assertion, the transmission of the first image data and the location data is neither shown nor suggested by paragraph [0072] of Tsubaki.

Further, Tsubaki at paragraph [0143] discloses that "The added-to-image information transmitted from the car navigator apparatus main body 502 is GPS information ... The display information contains texts ..., all these pieces of information" and at paragraph [0040] that "the added-to-image information contains at least either numerical locational information on the subject or identification information already imparted to the subject ... the display information is used by the photographer to check at least either the contents or correctness of the added-to-image information ... is either text information or image information." In view of the above disclosure of Tsubaki, ***neither the added-to-image information nor the display information is the image of the subject per se*** according to the definitions disclosed at paragraph [0040]. Thus, it is the ***added-to-image information*** and the ***display information*** that are disclosed at paragraph [0143] of Tsubaki. Therefore, contrary to the Examiner's assertion, the above feature of claim 1, i.e. the transmission of the ***first image per se*** and the ***location data*** is neither shown nor suggested by paragraph [0143] of Tsubaki.

For at least the above reasons, Applicant submits that claim 1 and its dependant claims 2-7, 9, and 11-14 are patentable in view of Tsubaki. In addition, each of independent claims 15 and 22 has the same feature as that of claim 1. Therefore, claims 15 and 22 and their dependant claims 16-18, 20-21, and 23 are patentable in view of Tsubaki.

2. Claim 8 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tsubaki in view of Walker (U.S. Patent No. 6,199,014). This rejection is respectfully traversed for the reasons set forth below.

Claim 8 depends on claim 1. Further, Walker fails to cure the deficiencies of Tsubaki. Therefore, Tsubaki and Walker, whether considered separately or in combination, fail to disclose or teach all of the features of claim 1, and thus claim 1 is patentable over Tsubaki and Walker. Claim 8 depending from claim 1 is also patentable for at least the same reasons set forth with respect to claim 1.

3. Claims 10 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tsubaki in view of Banno (U.S. Patent Publication No. 2002/0049064 A1). This rejection is respectfully traversed for the reasons set forth below.

Claims 10 and 19 depend on claims 1 and 15, respectively. Further, Banno fails to cure the deficiencies of Tsubaki. Therefore, Tsubaki and Banno, whether considered separately or in combination, fail to disclose or teach all of the features of claims 1 and 15, and thus claims 1 and 15 are deemed patentable over Tsubaki and Banno. Claims 10 and 19 depending from claims 1 and 15, respectively, are also patentable for at least the same reasons set forth with respect to claims 1 and 15.

Conclusion

All rejections having been addressed, it is respectfully submitted that claims 1-23 are in condition for allowance. Early and favorable indication of allowance is courteously solicited. If a petition for an extension of time is needed, then one is requested. Please charge any shortage in fees due in connection with the filing of this paper, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP

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Date: June 24, 2011
YSH/DWK/jr

Electronic Acknowledgement Receipt

EFS ID:	10382995
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/james rhee
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	24-JUN-2011
Filing Date:	27-MAR-2008
Time Stamp:	15:10:18
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		110624_0009_amendment.pdf	58261 bde40f9c0f6e17c7e389f4ba65b72ffb818ced7d	yes	8

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment After Final	1	1
	Claims	2	5
	Applicant Arguments/Remarks Made in an Amendment	6	8
Warnings:			
Information:			
	Total Files Size (in bytes):	58261	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/911,879	03/27/2008	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 06/24/2011

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DEBRA SAVOY/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 07/08/2011

LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

EXAMINER	
WOO, KUO-KONG	
ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
07/08/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 11/911,879	**Applicant(s)** CHOI ET AL.	
	Examiner KUO WOO	**Art Unit** 2617	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 June 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-18*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617

/KUO WOO/
Examiner, Art Unit 2617

Continuation of 3. NOTE: Additional limitations(location information into the first image)and (second imagedata including first image data and the location data) will require further search and consideration...

DO NOT ENTER: /K.W./ 07/01/2011

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Application Number	:	11/911,879	Confirmation No. 2595
Applicant	:	Jin-Seung CHOI et al.	
Filed	:	March 27, 2008	
Tech Cntr/AU	:	2617	
Examiner	:	Woo, Kuo-Kong	
Entitled	:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA	
Attorney Reference	:	4900-0009	
Customer Number	:	22429	

AMENDMENT UNDER 37 C.F.R. §1.116

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

The present Amendment is being filed to address the issues raised in the Final Official Action mailed April 1, 2011.

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	11911879	Filing Date	2008-03-27	Docket Number (if applicable)	4900-0009	Art Unit	2617
First Named Inventor	Jin-Seung CHOI et al.			Examiner Name	Kuo-Kong Woo		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☒ Other Amendment filed on June 24, 2011.

☐ Enclosed

☐ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 071337

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Yoon S. Ham/	Date (YYYY-MM-DD)	2011-07-21
Name	Yoon S. Ham	Registration Number	45307

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	11911879
Filing Date:	27-Mar-2008
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Filer:	Yoon Ham/james rhee
Attorney Docket Number:	4900-0009

Filed as Large Entity

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 1 month with $0 paid	1251	1	130	130

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for continued examination	1801	1	810	810
		Total in USD ($)		**940**

Electronic Acknowledgement Receipt	
EFS ID:	10568342
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/james rhee
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	21-JUL-2011
Filing Date:	27-MAR-2008
Time Stamp:	13:49:48
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$940
RAM confirmation Number	75
Deposit Account	071337
Authorized User	HAM,YOON S
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. 1.492 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Extension of Time	110721_0009_EOT.pdf	312180 3c89816e68e36fd0a543955524d8834db85859af	no	2
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	110721_0009_RCE.pdf	697465 f3a7fc4841321ba1d0d9cb513a9f42222b732992	no	3
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	32172 0812ca95982715d4db9bb6c50cd1a41da8c9d26d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1041817		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/22 (07-09)
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U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) **FY 2009** ***(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)***	Docket Number (Optional) 4900-0009
Application Number 11911879	Filed 2008-03-27
For LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE	
Art Unit 2617	Examiner Kuo-Kong Woo

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	
☑ One month (37 CFR 1.17(a)(1))	$130	$65	$ 130
☐ Two months (37 CFR 1.17(a)(2))	$490	$245	$
☐ Three months (37 CFR 1.17(a)(3))	$1110	$555	$
☐ Four months (37 CFR 1.17(a)(4))	$1730	$865	$
☐ Five months (37 CFR 1.17(a)(5))	$2350	$1175	$

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 071337.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 45307

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

/Yoon S. Ham/	2011-07-21
Signature	Date
Yoon S. Ham	703-535-7340
Typed or printed name	Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

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The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	To be Mailed
11/911,879	03/27/2008	☐

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☐		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	07/21/2011	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $ =		OR	X $52=	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $220=	0
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/SHIRELL M. CARMICHAEL/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 09/14/2012

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	**PAPER NUMBER**
2617	

MAIL DATE	DELIVERY MODE
09/14/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/911,879	CHOI ET AL.	
	Examiner	Art Unit	
	KUO WOO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-23* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-23* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/24/2011 has been entered.

Response to Amendment

2. This action is response to the Amendment filed on June 24, 2011.

3. Claims 1, 6, 8-9, 12, 15-16, and 22 have been amended. Claims 1-23 are currently pending.

Response to Remarks

4. Applicant has amended claims 1, 15 and 22 in response to the rejection of claims1, 15 and 22 under 35 U.S.C. §112 to comply with the written description. Accordingly, the rejections of claims1, 15 and 22 under 35 U.S.C. §112 is withdrawn.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

6. Claims 1, 3, 5-9, 11, 13-16 and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Clapper (US PAT 6,023,241).

Regarding claims 1 and 15, Clapper discloses “a location-based service (Col. 5:40-42, as illustrated in figure 7,the display 20 may also include textual GPS data, as indicated at 110) method using image data(a digital image 108) provided by a terminal(Col. 2: 1, A player and recorder 10, shown in FIG. 1) equipped with a camera (camera 18), and using location data GPS Data 110) that includes location information of the terminal, comprising”:

(a) A step (Col. 5:40, a digital image 108 on a frame that may be displayed on the display 20) of generating first image data (Col. 5, 40, a digital image 108) with the terminal at a predetermined location;

(b) A step (Col. 5: 23, the linking may simply serialize the data so that one may sequence from one point to a second point) of receiving location data (Col. 5:40, textual GPS data, as indicated at 110) of the predetermined location (Col.5:21, a prior point with associated multimedia landmark information);

(c) A step (Col. 5:41-42, the display 20 (first image) may also include textual GPS data, as indicated at 110(location information). Audio information 112 may be associated with the screen display) of inserting the received location data into the first image data to generate a second image data; and

(d) A step of transmitting the second image data (Col. 5: 49-51,a plurality of physical landmarks (second images) such as streets 116, and a plurality of points 114 which include recorded landmark multimedia data), the second image data including the

first image data and the location data, to another terminal and providing a location-based service(Col. 5:59-62, the map mode may serve as a guide to assist the user in cycling through the various points landmarks and to understand their physical association with one another(another terminal)) to the another terminal using the location data of the second image data.

Regarding claim 3, Clapper discloses “a step of selecting the map providing service” (Col. 5:34-36, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark);

“a step of transmitting a service request signal (Col. 4:41-45, map information about a plurality of different locations, may be linked together so that it may be serially displayed or displayed in any particular order the **user wishes using a map display** for example to facilitate selection of the information to be displayed) and the location data to a map providing system”; and

“a step (Col. 6: 9-11, A location may be selected by entering the mapping mode, and selecting a point such as the point 114D as indicated at 118) wherein the map providing system provides a map corresponding to the location data”.

Regarding claim 5, Clapper discloses “the step of selecting a type of the map (Col. 5:53-55, while the audio and video associated with a particular point is being displayed, a corresponding map depiction **can be selected which shows the location** of the point where the video was captured in some embodiments. Thus, the user can

switch back and forth from the display mode to the map mode) to determine the location of the various frames, after the step (dl)".

Regarding claim 6, Clapper discloses "(dl) a step of selecting the guiding service" (Col. 6: 31-34, the recorder 10 (the terminal) may be coupled to a computer 36 to access information from the Internet 40. Preprogrammed excursions (guiding service) may then be downloaded from the excursion server 42 and stored in the storage device 32);

"(d2) a step of transmitting (Col. 6:38, the information may also be accessed over a direct modem connection or through a network connection), a service request signal and the location data to a navigation system" (Col.5: 63-67, mapping software for use in connection with GPS receivers and automatically generates a map of the locale around input GPS coordinates); and

"(d3) a step(Col. 6:9-11, a location may be selected, for example, by entering the mapping mode, and selecting a point such as the point 114D as indicated at 118. That image or that location is automatically displayed in the display mode) wherein the navigation system provides a navigation data corresponding to the location data".

Regarding claim 7, Clapper discloses "wherein current location data of the terminal is transmitted to the navigation system in the step (d2)" (Col. 6:26-30, the user may then switch to the display mode to see the images corresponding to mapped points 114. If the user has cycled through all of the predetermined points on the map (diamond 132), the flow cycles back through the corresponding displays associated with each map point).

Regarding claim 8, Clapper discloses “wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time” (Col. 6:42-44, the user can display video and audio information which may describe those locations. In this way, the user can take a guided multimedia tour without having a personal guide go on the trip) wherein to get virtual tour for destination trip information.

Regarding claims 9, 11 and 20, Clapper discloses “wherein the location data are provided by a location data providing system” (Col. 3:48-49, the controller 28 also receives input signals from the global positioning system receiver 1 and (Col. 2:52-53, the controller 28 may communicate with a computer 36) and (Col.4:55-56, GPS data may include information about the current time, GPS coordinates for the location and the like)

Regarding claim 13, Clapper discloses “wherein the terminal equipped with the camera includes a camera phone or a digital camera” (Col. 2:12, a camera lens 18 is provided in one end of the housing 12).

Regarding claims 14 and 16, Clapper discloses “wherein the digital camera includes a module for receiving the location data” (Col. 2:16-17, a display screen 20 may display information recorded by the camera 18 as well as GPS information such as current time and location or mapping information) wherein camera with housing 10 includes GPS information data receiver.

Regarding claim 21, Clapper discloses “a GPS antenna (Col. 2:14-15, the GPS antenna may be integrated into the housing 12) for receiving the location data from the location data providing system”.

Regarding claims 22 and 23, Clapper discloses “the terminal (Col. 2: 1, a player and recorder 10, shown in FIG. 1);

“A location data providing system (a global positioning system (GPS) receiver 14) for providing the location data of the terminal”; and

“a service system (Col. 4:41-45, travel information, which may include information about a plurality of different locations, may be linked together so that it may be serially displayed or displayed in any particular order the user wishes using a map display) and (Col.6:34-35, preprogrammed excursions may then be downloaded from the excursion server 42) for providing a service according to the a user’s selection based on the location data”.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Clapper as applied to claim 1 above, and further in view of Haruki (US PGPUB 2002/0135680 A1).

Regarding claims 2 and 17, Clapper discloses “(cl) a step of compressing and storing (Col.4:12-13, the media file may then be stored in association with the identifier as indicated in block 66(store second image data)) the second image data, after the step (c)”. However, Clapper does not explicitly disclose compressing the image.

In an analogous art, Haruki discloses ([32], system controller 30 creates an image file including the compressed image signal generated by the signal processing circuit 14, the location information and the time information detected by himself, and his own camera ID within a memory card 18).

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by compressed image signal generated by the signal processing circuit 14 as taught by Haruki for the purpose of easy to store and compress image for the subject data.

9. Claims 4,10 ,12 and 18-19 and are rejected under 35 U.S.C. 103(a) as being obvious over Clapper as applied to claim 1 above, and further in view of Basir (US PGPUB 2006/007755 A1).

Regarding claims 4, 10, and 12, Clapper discloses “wherein the map includes at least one of geographical information (Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116) traffic information, administrative district information, and information including the latitude and the longitude of the location data”.

However, Clapper discloses GPS as location information, but does not explicitly disclose latitude and the longitude of the location data of location data.

In an analogous art, Basir discloses ([35], A fixed location is defined by latitude, longitude, and a description of the surrounding region).

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by GPS location information by latitude, longitude, and a description of the surrounding region as taught by Basir for the purpose of clear define the subject location.

Regarding claims 10 and 18-19, Clapper discloses (Col. 5: 62-66, the mapping software automatically generates a map of the locale around input GPS coordinates).

However, Clapper does not explicitly disclose other position system

In an analogous art, Basir discloses “wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS)” ([27], the sources 19 of position information can include: AFLT (Advanced Forward Link Trilateration), or other methods for determining mobile device location using cell towers on a mobile phone network) wherein cell positioning system is utilized to determine the location of mobile device,.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by GPS location information by latitude, longitude, and mobile device location using cell towers on a mobile phone network as taught by Basir for the purpose of clear define the subject location.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang can be reached on 571-272-7667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/Kent Chang/
Supervisory Patent Examiner, Art Unit 2617

Notice of References Cited	Application/Control No. 11/911,879	Applicant(s)/Patent Under Reexamination CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,023,241 A	02-2000	Clapper, Edward O.	342/357.32
*	B	US-2002/0135680 A1	09-2002	Haruki, Toshinobu	348/207.2
*	C	US-2006/0077055 A1	04-2006	Basir, Otman Adam	340/539.13
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/05/2010	03/24/2011	08/29/2012						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	✓						
	9	✓	✓	✓						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
	17	✓	✓	✓						
	18	✓	✓	✓						
	19	✓	✓	✓						
	20	✓	✓	✓						
	21	✓	✓	✓						
	22	✓	✓	✓						
	23	✓	✓	✓						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"6023241".pn. and excursion and location	US-PGPUB; USPAT	ADJ	ON	2012/08/29 15:19
L2	1	"6023241".pn. and excursion and location and GPS	US-PGPUB; USPAT	ADJ	ON	2012/08/29 15:20
S1	1	"11911879"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:07
S2	47	"6437797"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S3	1	"6437797".pn.	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S4	1	"7664296".pn.	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:08
S5	2	"20020101619"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:09
S6	53	("4737927" | "5283562" | "5500743" | "5550584" | "5638184" | "5682441" | "5748109" | "5784059" | "5835266").PN. OR ("6437797").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:10
S7	24	("20020036565" | "20020152390" | "20070047770" | "4768099" | "4992887" | "5307297" | "5334823" | "5412727" | "5467403" | "5579393" | "5724155" | "5737491" | "5865745" | "5920317" | "5960155" | "6023241" | "6038012" | "6038333" | "6040783" | "6128398" | "6381348" | "6535243" | "6542627" | "6633223").PN. OR ("7664296").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:11
S8	145	("5124915" | "5414462" | "5517419" | "5596494" | "5878356" | "5894323" | "5904724").PN. OR ("6023241").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:12
S9	2	"20020135680"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:13
S10	1	"20020049064"	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:14
S11	198	(US-5365516-$ or US-5526357-$ or US-5303393-$ or US-5388074-$ or US-6047192-$ or US-5382508-$ or US-5689245-$ or US-5742509-$ or US-	USPAT	ADJ	ON	2010/10/05 18:14

		4605921-$ or US-4949287-$ or US-4994971-$ or US-5493709-$ or US-5524234-$ or US-5611064-$ or US-5613109-$ or US-5642365-$ or US-5790183-$ or US-5860111-$ or US-5873089-$ or US-5926208-$ or US-5956369-$ or US-5999200-$ or US-6098048-$ or US-6230312-$ or US-4270206-$ or US-4387271-$).did. or (US-4586094-$ or US-4796185-$ or US-4965856-$ or US-4970718-$ or US-5027395-$ or US-5206837-$ or US-5231381-$ or US-5241635-$ or US-5283884-$ or US-5375251-$ or US-5402151-$ or US-5450370-$ or US-5491669-$ or US-5519829-$ or US-5625721-$ or US-5648938-$ or US-5703972-$ or US-5872987-$ or US-5886705-$ or US-5913618-$ or US-5922073-$ or US-5941930-$ or US-5973731-$ or US-6021250-$ or US-6085099-$ or US-6088706-$ or US-6119179-$).did. or (US-6134583-$ or US-6219775-$ or US-4252897-$ or US-4266271-$ or US-4288659-$ or US-4298959-$ or US-4350238-$ or US-4359622-$ or US-4433377-$ or US-4499597-$ or US-4530045-$ or US-4569048-$ or US-4615040-$ or US-4755936-$ or US-4791547-$ or US-4802199-$ or US-4817095-$ or US-4829475-$ or US-4933833-$ or US-4949240-$ or US-4973956-$ or US-4975870-$ or US-4979594-$ or US-4999783-$ or US-5016221-$ or US-5179633-$ or US-5293565-$).did. or (US-5301141-$ or US-5305253-$ or US-5353399-$ or US-5388257-$ or US-5408867-$ or US-5410695-$ or US-5428685-$ or US-5459516-$ or US-5465291-$ or US-5493632-$ or US-5497356-$ or US-5537535-$ or US-5541396-$ or US-5548728-$ or US-5559512-$ or US-5576973-$ or US-5592450-$ or US-5596565-$ or US-5602986-$ or US-5606707-$ or US-5617538-$ or US-5619371-$ or US-5623285-$ or US-5634063-$ or US-5644718-$ or US-5657431-$ or US-5671451-$).did. or (US-5684476-$ or US-5699105-$ or US-5710706-$ or US-5712981-$ or US-5726893-$ or US-5734787-$ or US-5748322-$ or US-5748555-$ or US-5768235-$ or US-5818356-$ or US-5825759-$ or US-5850416-$ or US-5860119-$ or US-5870719-$ or US-5889917-$ or US-5930801-$ or US-5936180-$ or US-5955973-$ or US-6026151-$ or US-6041386-$ or US-6043658-$ or US-6049711-$ or US-6070123-$ or US-6078532-$ or US-6081855-$ or US-6091555-$ or US-RE36791-$).did. or (US-6104344-$ or US-6115206-$ or US-					

		6126070-$ or US-6154139-$ or US-6154658-$ or US-6163701-$ or US-6188776-$ or US-6199014-$ or US-6201804-$ or US-6226710-$ or US-6229998-$ or US-6239628-$ or US-6240167-$ or US-6240369-$ or US-4258236-$ or US-4262332-$ or US-4273955-$ or US-4276925-$ or US-4284883-$ or US-4284160-$ or US-4293857-$ or US-4306898-$ or US-RE31069-$ or US-4315101-$ or US-4317010-$ or US-4317168-$ or US-4321683-$).did. or (US-4328544-$ or US-4345315-$ or US-4360265-$ or US-4370730-$ or US-4373198-$ or US-4384195-$ or US-4390974-$ or US-4393448-$ or US-4397569-$ or US-4403119-$ or US-4408271-$ or US-4414645-$ or US-4417317-$ or US-4419384-$ or US-4437672-$ or US-4438507-$ or US-4454383-$ or US-4458332-$ or US-4468750-$ or US-4479092-$ or US-4482902-$ or US-4513390-$ or US-4516206-$ or US-4527262-$ or US-4531311-$ or US-4536647-$ or US-4545576-$).did. or (US-4555699-$ or US-4563096-$ or US-4569034-$ or US-4578535-$ or US-4589100-$ or US-4589081-$ or US-4592036-$ or US-4604750-$ or US-4613913-$ or US-4620446-$).did.				
S12	4	S11 and image and map and location data and navigation	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:15
S13	4	S11 and image and map and location data and latitude	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:16
S14	2	S11 and image and map and location and GPS not S13	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:18
S15	91	("4937751" | "4951211" | "4992947" | "4994971" | "5043902" | "5103400" | "5214793" | "5381338" | "5396431" | "5442557" | "5537323" | "5559949" | "5587911" | "5596494" | "5610822" | "5614898" | "5646629" | "5648768" | "5659469" | "5689252").PN. OR ("6199014").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/10/05 18:23
S16	2135	455/456.2	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:54
S17	71	455/456.2 and image and map and guide and location	US-PGPUB; USPAT	ADJ	ON	2010/10/05 18:55
S18	81	455/456.2 and image and map and guid$3 and location and GPS	US-PGPUB; USPAT	ADJ	ON	2010/10/05 19:33
S19	21	455/456.2 and image and map and guid$3 and location and GPS and camera	US-PGPUB; USPAT	ADJ	ON	2010/10/05 19:33
S20	17	(US-20020101619-$ or US-20020135680-$	US-	ADJ	ON	2010/10/05

		or US-20020049064-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT			21:43
S21	3	S20 and route and traffic	US-PGPUB; USPAT	ADJ	ON	2010/10/05 21:44
S22	5	S20 and base station	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:03
S23	5	S20 and base station and position	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:04
S24	1	S20 and base station and position system	US-PGPUB; USPAT	ADJ	ON	2010/10/05 22:04
S25	1	"11911879" and transmit and first image and second image	US-PGPUB; USPAT	ADJ	ON	2011/03/23 18:40
S28	1	"11911879" and transmit and first image and second image and user	US-PGPUB; USPAT	ADJ	ON	2011/03/23 18:42
S29	4	("20020049064" | "20020101619" | "20020101619" | "6199014" | "6437797" | "6437797").PN.	US-PGPUB; USPAT	ADJ	ON	2011/03/23 19:53
S30	1150	smart phone with GPS	US-PGPUB; USPAT	ADJ	OFF	2012/08/27 21:09
S31	56	S30 and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2012/08/27 21:10
S32	45	S30 and (image or photo) and location and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2012/08/27 21:17
S33	19	S30 and (image or photo) and location and map and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2012/08/27 21:22
S34	1	"7437158".pn.	US-PGPUB; USPAT	ADJ	ON	2012/08/27 21:31
S35	12	("20040192309" | "20040203998" | "20060111084" | "20070149133" | "20070249316" | "7072657").PN. OR ("7437158").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2012/08/27 21:32
S36	3171	(image or photo)with location and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2012/08/27 21:41
S37	0	(smart phone or PDA) and guiding service and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2012/08/27 21:43
S38	185	(smart phone or PDA) and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2012/08/27 21:43

S39	56	("20010014222" | "20010015759" | "20010016849" | "20010051850" | "20010051876" | "20010056326" | "20020007311" | "20020032787" | "20020071677" | "20020093435" | "20020128773" | "20020143762" | "20020198736" | "20030004693" | "20030009281" | "20030021591" | "20030069693" | "20030069893" | "20030078724" | "20030164796" | "20030164822" | "20030184654" | "20030202104" | "20040049345" | "20040054463" | "20040075697" | "4949268" | "5819092" | "5890171" | "5893101" | "5913078" | "6023241" | "6047234" | "6133947" | "6182010" | "6282362" | "6323885" | "6459388" | "6466865" | "6484086" | "6504571" | "6604126" | "6629100" | "6691032" | "6819356" | "6883146" | "6895126" | "6914626" | "6943825" | "6950198" | "6965828" | "6977679" | "7100190" | "7135994" | "7171113" | "7197158").PN. OR ("8116598").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2012/08/27 21:57
S40	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 20:52
S41	12	S40 and location and compress$3 and stor$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 20:53
S42	12	S40 and location and compress$3 and stor$3 and image	US-PGPUB; USPAT	ADJ	ON	2012/08/28 20:53
S43	5	S40 and location and compress$3 and stor$3 and image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 20:54
S44	15	S40 and location and (compress$3 or stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 20:55
S45	3	S40 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 20:55
S46	2	"10101594"	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:02
S47	2	"10/101594"	US-PGPUB;	ADJ	ON	2012/08/28 21:03

			USPAT			
S48	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:05
S49	3	S48 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:05
S50	3	S48 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:06
S51	1	"10101594" and compress$3	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:08
S52	2	"10101594"	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:08
S53	1	"10101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:10
S54	2	"10/101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:10
S57	1	"6023241".pn.	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:27
S58	1	S57 and map$4	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:28
S59	1028000	S57 and map$4 and computer or service	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:32
S60	1	S57 and map$4 and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:32
S61	1	S57 and map$4 with location and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:38
S62	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-	US-PGPUB; USPAT	ADJ	OFF	2012/08/28 21:48

		6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.				
S63	15	S62 and latitude and longitude	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:50
S64	9	S62 and (latitude and longitude) with location	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:50
S65	8	S62 and (latitude and longitude) with location and positioning system	US-PGPUB; USPAT	ADJ	ON	2012/08/28 21:52
S66	1	"6023241".pn. and excursion	US-PGPUB; USPAT	ADJ	ON	2012/08/29 14:52

EAST Search History (Interference)

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8/ 29/ 2012 4:22:54 PM
C:\ Users\ kwoo\ Documents\ EAST\ Workspaces\ 11911879.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010,3/23/2011	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW
342	357.2	8/29/2012	kw
340	539.13	8/29/2012	kw
348	207.2	8/29/2012	kw

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010, 8/29/2012	KW
PCT search	10/4/2010,3/23/2011	KW

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

/KUO WOO/ Examiner.Art Unit 2617	

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Jin-Seung CHOI et al.	:	Confirmation No.: 2595
	:	
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2617
	:	
Filed: March 27, 2008	:	Examiner: WOO, Kuo-Kong

For: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The following amendments and remarks are submitted in response to the Office Action dated September 14, 2012.

AMENDMENTS TO THE CLAIMS:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

Listing of the Claims

1. (**Currently amended**) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location;

(b) a step of receiving location data of the predetermined location;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to [[the]] the another terminal using the location data of the second image data.

2. (Original) The location-based service method according to claim 1, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. (Previously presented) The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. (Original) The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

6. (Previously presented) The location-based service method according to claim 1, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1) a step of selecting the guiding service;

(d2) a step of transmitting a service request signal and the location data to a navigation system; and

(d3) a step wherein the navigation system provides a navigation data corresponding to the location data.

7. (Previously presented) The location-based service method according to claim 6, wherein current location data of the terminal is transmitted to the navigation system in the step (d2).

8. (Previously presented) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time.

9. (Previously presented) The location-based service method according to claim 1, wherein the location data are provided by a location data providing system.

10. (Previously presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. (Previously presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. (Previously presented) The location-based service method according to claim 1, wherein the location data includes information on latitude and longitude of the terminal or base station.

13. (Previously presented) The location-based service method according to claim 1, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (Previously presented) The location-based service method according to claim 13, wherein the digital camera includes a module for receiving the location data.

15. (**Currently amended**) A terminal, the terminal configured to receive location data, comprising:

a camera section for generating a first image data at a predetermined location;

a location data processing section for prompting a user to choose whether or not to insert the location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the location data into the first image data to generate a second image data; and

an image data storing section for receiving and storing the second image data; and

a transmitting section for transmitting the second image data, the second image data including the first image data and the location data, to another terminal, so that a location-based service is provided to the another terminal using the location data of the second image data.

16. (**Currently amended**) The terminal according to claim 15, wherein the camera section is configured to receive the location data.

17. (Presently presented) The terminal according to claim 15, further comprising a compression controller for compressing the second image data and transmitting the second image data to the image data storing section.

18. (Presently presented) The terminal according to claim 15, wherein the location data is provided by a location data providing system using a base station or a satellite.

19. (Presently presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

20. (Presently presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. (**Currently amended**) The terminal~~location-based service system performing the method~~ according to claim [[1]]20, further comprising:

~~the terminal;~~

~~a location data providing system for providing the location data of the terminal; and~~

a service system for providing a service according to a user's selection based on the location data.

23. (**Currently amended**) The terminal~~location-based service system~~ according to claim 22, wherein the service system is a map providing system or a navigation system.

REMARKS

Claims 1-23 are pending in the application. Several claims have been revised to improve claim language. The amended claims find support in the application as filed. No new matter is believed to have been introduced through the foregoing amendments. Reconsideration and allowance of the present application are respectfully requested.

Applicant-Initiated Interview

Applicants would like to thank the Examiners for kindly attending the personal interview held on December 6, 2012. Agreement was reached that Applicants' proposed amendment would overcome the rejection of record.

Rejections under 35 U.S.C. § 102

The Office rejected claims 1, 3, 5-9, 11, 13-16, and 20-23 under 35 U.S.C. § 102(b) as being anticipated by Clapper (US Pat. No. 6,023,241). Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added).

Claims 1 and 15 recite, *inter alia*, "transmitting the second image data, the second image data including the first image data and the location data, to another terminal." Clapper does not disclose or suggest this limitation. The Office cites col. 5, lines 49-51 and 59-62 in relation to this limitation. However, the cited portions of Clapper do not mention anything related to transmitting data to another terminal. Furthermore, Clapper, in its entirety, fails to disclose or suggest "transmitting the second image data, the second image data including the first image data and the location data, to another terminal." Therefore, it is respectfully submitted that the anticipation rejection over Clapper is improper.

Although Applicants do not agree with the anticipation rejection over clapper, in the interest of expediting prosecution, the independent claims 1 and 15 have been amended. Amended independent claims 1 and 15 recite, *inter alia*, prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data. Clapper fails to disclose or suggest this feature. For example, in Clapper the GPS data is automatically superimposed on the image. There is no option to choose whether or not to insert the received location data into the first image data (see, e.g., step 92 in Fig. 6). On the other hand, the present application discloses prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data (see paragraph 29 lines 6-12; step S206 in Fig. 2).

Accordingly, reconsideration and withdrawal of the rejections of claims 1 and 15, as being anticipated by Clapper, are respectfully requested. Claims 3, 5-9, 11, 13, 14, 16, and 20-23 depend from claim 1 or 15, recite additional features, and distinguish over the applied references for the reasons set forth above and/or the additional features recited.

Rejections under 35 U.S.C. § 103

The Office rejected claims 2 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Clapper in view of Haruki (US Pat. Appl. Pub. No. 2002/0135680).

The Office rejected claims 4, 10, 12, 18, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Clapper in view of Basir (US Pat. Appl. Pub. No. 2006/0077055).

Applicant respectfully traverses these rejections.

Claims 2, 4, 10, 12, and 17-19 depend from either claim 1 or 15. Claims 1 and 15 recite, *inter alia*, "transmitting the second image data, the second image data including the first image data and the location data, to another terminal." Clapper does not disclose or suggest this limitation as discussed above. Haruki and Basir fail to cure this deficiency.

Accordingly, reconsideration and withdrawal of the rejection of claims 2, 4, 10, 12, and 17-19, as being unpatentable over Clapper in view of either Haruki or Basir, are respectfully requested.

Conclusion

All rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicants' attorney of record, to facilitate advancement of the present application.

All rejections having been addressed, it is respectfully submitted that claims 1-22 are now in condition for allowance. Early and favorable indication of allowance is courteously solicited. Please charge any shortage in fees due in connection with the filing of this paper, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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Date: December 14, 2012
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Electronic Acknowledgement Receipt

EFS ID:	14479700
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Yun Lee
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	14-DEC-2012
Filing Date:	27-MAR-2008
Time Stamp:	22:08:27
Application Type:	U.S. National Stage under 35 USC 371

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2012-12-14_Response_to_OA_2012-09-14_YHL.pdf	329220 11d93cf4652aac988c04fb33f030d8df4776477a	yes	8

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	5
	Applicant Arguments/Remarks Made in an Amendment	6	8
Warnings:			
Information:			
	Total Files Size (in bytes):	329220	

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/911,879	03/27/2008	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 12/14/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $ =		OR	X $62=	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $250=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/TONI HAKIM/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 12/18/2012

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	PAPER NUMBER
2698	

MAIL DATE	DELIVERY MODE
12/18/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	**Application No.** 11/911,879	**Applicant(s)** CHOI ET AL.	
	Examiner KUO WOO	**Art Unit** 2698	

All participants (applicant, applicant's representative, PTO personnel):

(1) *KUO WOO*.

(2) *Nathan Mitchell*.

(3) *Yun Lee (Reg. No. 63274)*.

(4)_____.

Date of Interview: *06 December 2012*.

Type: ☐ Telephonic ☐ Video Conference
☒ Personal [copy given to: ☐ applicant ☒ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: *n/a*.

Issues Discussed ☐101 ☐112 ☒102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *6,023,241 (Clapper)*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner agreed that proposed amendment appears to overcome rejection of record. However further consideration/search will be required.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/KUO WOO/ Examiner, Art Unit 2698	/Kent Chang/ Supervisory Patent Examiner, Art Unit 2698

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 02/19/2013

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	PAPER NUMBER
2698	

MAIL DATE	DELIVERY MODE
02/19/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/911,879	CHOI ET AL.	
	Examiner	Art Unit	
	KUO WOO	2698	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2012*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-23* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-23* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

FINAL ACTION

Response to Amendment

1. This action is response to the communication filed on December 14, 2012.

2. Claims 1-23 are pending in this action. Claims 1, 15-16 and 22-23 have been amended.

3. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3, 5-9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clapper (US PAT 6,023,241) in view of Takahashi et al. (US PGPUB 2004/0229656 A1).

Regarding claims 1 and 15, Clapper discloses "a location-based service (Col. 5:40-42, as illustrated in figure 7,the display 20 may also include textual GPS data, as indicated at 110) method using image data(a digital image 108) provided by a terminal(Col. 2: 1, A player and recorder 10, shown in FIG. 1) equipped with a camera (camera 18), and using location data GPS Data 110) that includes location information of the terminal, comprising":

(a) A step of generating first image data (Col. 5, 40, a digital image 108) and with the terminal at a predetermined location (Col. 5:40, a digital image 108 on a frame that may be displayed on the display 20 may also include textual GPS data as (The Washington Monument));

(b) A step of the predetermined location (Col.5:21, a prior point with associated multimedia landmark information) and (Col. 5: 23, the linking may simply serialize the data so that one may sequence from one point to a second point) of receiving location data (Col. 5:40, textual GPS data, as indicated at 110);

(c) A step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, (Col. 5:41-42, the display 20 (first image) may also include textual GPS data, as indicated at 110(location information). Audio information 112 may be associated with the screen display) of inserting the received location data into the first image data to generate a second image data; and

(d) A step of transmitting the second image data (Col. 5: 49-51,a plurality of physical landmarks (second images) such as streets 116, and a plurality of points 114 which include recorded landmark multimedia data), the second image data including the first image data and the location data, to another terminal and providing a location-based service(Col. 5:59-62, the map mode may serve as a guide to assist the user in cycling through the various points landmarks and to understand their physical association with one another(another terminal)) to the another terminal using the location data of the second image data.

However, Clapper does not explicitly disclose a step of prompting a user and insert location data.

In an analogous art, Takahashi discloses ([68], the cellular phone 1, the image is displayed (Step S40), the operation will be in a waiting state waiting for the keystroke including the function key afterwards (Step S42). Next, the operation judges whether or not the function key (playback key) has been depressed (Step S44)) wherein prompting and waiting for user to decide next steps.

([94] FIG. 19 is a conceptual diagram showing the configuration of the system operation of the fourth embodiment. The cellular phone 3a has an image pick-up function by a pick-up device. Furthermore, the cellular phone 3a has a function to insert the positional information (location data) of a photographic location into an image file and to transmit the image file by attachment in an E-mail to the cellular phone 3b (transmit to another terminal))wherein insert location data and send image to second terminal cellular phone b.

Therefore, the Takahashi provides motivation to one skilled in the art at time of invention to modify the Clapper teaching to insert location data into image and send to cellular phone b as to arrive at claimed invention.

Regarding claim 3, Clapper discloses “a step of selecting the map providing service” (Col. 5:34-36, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark);

"a step of transmitting a service request signal (Col. 4:41-45, map information about a plurality of different locations, may be linked together so that it may be serially displayed or displayed in any particular order the **user wishes using a map display** for example to facilitate selection of the information to be displayed) and the location data to a map providing system"; and

"a step (Col. 6: 9-11, A location may be selected by entering the mapping mode, and selecting a point such as the point 114D as indicated at 118) wherein the map providing system provides a map corresponding to the location data".

Regarding claim 5, Clapper discloses "the step of selecting a type of the map (Col. 5:53-55, while the audio and video associated with a particular point is being displayed, a corresponding map depiction **can be selected which shows the location** of the point where the video was captured in some embodiments. Thus, the user can switch back and forth from the display mode to the map mode) to determine the location of the various frames, after the step (dl)".

Regarding claim 6, Clapper discloses "(dl) a step of selecting the guiding service" (Col. 6: 31-34, the recorder 10 (the terminal) may be coupled to a computer 36 to access information from the Internet 40. Preprogrammed excursions (guiding service) may then be downloaded from the excursion server 42 and stored in the storage device 32);

"(d2) a step of transmitting (Col. 6:38, the information may also be accessed over a direct modem connection or through a network connection), a service request signal and the location data to a navigation system" (Col.5: 63-67, mapping software for use in

connection with GPS receivers and automatically generates a map of the locale around input GPS coordinates); and

"(d3) a step(Col. 6:9-11, a location may be selected, for example, by entering the mapping mode, and selecting a point such as the point 114D as indicated at 118. That image or that location is automatically displayed in the display mode) wherein the navigation system provides a navigation data corresponding to the location data".

Regarding claim 7, Clapper discloses "wherein current location data of the terminal is transmitted to the navigation system in the step (d2)" (Col. 6:26-30, the user may then switch to the display mode to see the images corresponding to mapped points 114. If the user has cycled through all of the predetermined points on the map (diamond 132), the flow cycles back through the corresponding displays associated with each map point).

Regarding claim 8, Clapper discloses "wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time" (Col. 6:42-44, the user can display video and audio information which may describe those locations. In this way, the user can take a guided multimedia tour without having a personal guide go on the trip) wherein to get virtual tour for destination trip information.

Regarding claims 9, and 11, Clapper discloses "wherein the location data are provided by a location data providing system" (Col. 3:48-49, the controller 28 also receives input signals from the global positioning system receiver 1 and (Col. 2:52-53, the controller 28 may communicate with a computer 36) and (Col.4:55-56, GPS data

may include information about the current time, GPS coordinates for the location and the like)

Regarding claim 12, Clapper discloses "location data includes information on latitude and longitude of the terminal base station. (Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116) wherein information including the latitude and the longitude of the location data".

Regarding claim 13, Clapper discloses "wherein the terminal equipped with the camera includes a camera phone or a digital camera" (Col. 2:12, a camera lens 18 is provided in one end of the housing 12).

Regarding claims 14 and 16, Clapper discloses "wherein the digital camera includes a module for receiving the location data" (Col. 2:16-17, a display screen 20 may display information recorded by the camera 18 as well as GPS information such as current time and location or mapping information) wherein camera with housing 10 includes GPS information data receiver.

6. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Clapper and Takahashi as applied to claim 1 above, and further in view of Haruki (US PGPUB 2002/0135680 A1).

Regarding claims 2 and 17, Clapper discloses "(cl) a step of compressing and storing (Col.4:12-13, the media file may then be stored in association with the identifier as indicated in block 66(store second image data)) the second image data, after the

step (c)". However, Clapper and Takahashi do not explicitly disclose compressing the image.

In an analogous art, Haruki discloses ([32], system controller 30 creates an image file including the compressed image signal generated by the signal processing circuit 14, the location information and the time information detected by himself, and his own camera ID within a memory card 18).

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper and Takahashi by compressed image signal generated by the signal processing circuit 14 as taught by Haruki for the purpose of easy to store and compress image for the subject data.

7. Claims 4,10 and 18-23 and are rejected under 35 U.S.C. 103(a) as being obvious over Clapper and Takahashi as applied to claim 1 above, and further in view of Basir (US PGPUB 2006/007755 A1).

Regarding claim 4, Clapper discloses “wherein the map includes at least one of geographical information (Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116) traffic information, administrative district information, and information including the latitude and the longitude of the location data”.

However, Clapper discloses GPS as location information, but does not explicitly disclose latitude and the longitude of the location data of location data.

In an analogous art, Basir discloses ([35], A fixed location is defined by latitude, longitude, and a description of the surrounding region).

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by GPS location information by latitude, longitude, and a description of the surrounding region as taught by Basir for the purpose of clear define the subject location.

Regarding claims 10 and 18-19, Clapper discloses (Col. 5: 62-66, the mapping software automatically generates a map of the locale around input GPS coordinates).

However, Clapper does not explicitly disclose CPS system

In an analogous art, Basir discloses “wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS)” ([27], the sources 19 of position information can include: AFLT (Advanced Forward Link Trilateration), or other methods for determining mobile device location using cell towers on a mobile phone network) wherein cell positioning system is utilized to determine the location of mobile device,.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by GPS location information by latitude, longitude, and mobile device location using cell towers on a mobile phone network as taught by Basir for the purpose of clear define the subject location.

Regarding claim 20, Clapper discloses "wherein the location data are provided by a location data providing system" (Col. 3:48-49, the controller 28 also receives input signals from the global positioning system receiver 1 and (Col. 2:52-53, the controller 28 may communicate with a computer 36) and (Col.4:55-56, GPS data may include information about the current time, GPS coordinates for the location and the like)

Regarding claim 21, Clapper discloses "a GPS antenna (Col. 2:14-15, the GPS antenna may be integrated into the housing 12) for receiving the location data from the location data providing system".

Regarding claims 22 and 23, Clapper discloses "a service system (Col. 4:41-45, travel information, which may include information about a plurality of different locations, may be linked together so that it may be serially displayed or displayed in any particular order the user wishes using a map display) and (Col.6:34-35, preprogrammed excursions may then be downloaded from the excursion server 42) for providing a service according to the a user's selection based on the location data".

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang can be reached on 571-272-7667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2698

/Kent Chang/
Supervisory Patent Examiner, Art Unit 2698

Notice of References Cited	Application/Control No. 11/911,879	Applicant(s)/Patent Under Reexamination CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2698	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2004/0229656 A1	11-2004	Takahashi et al.	455/566
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2698

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010,3/23/2011	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW
342	357.2	8/29/2012	kw
340	539.13	8/29/2012	kw
348	207.2	8/29/2012	kw

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010, 8/29/2012	KW
PCT search	10/4/2010,3/23/2011	KW
Consulted with PE N Mitchell for final rejection	12/16/2012	KW

INTERFERENCE SEARCH

/KUO WOO/ Examiner.Art Unit 2698	

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/KUO WOO/ Examiner.Art Unit 2698	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/05/2010	03/24/2011	08/29/2012	02/07/2013					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	✓	✓					
	8	✓	✓	✓	✓					
	9	✓	✓	✓	✓					
	10	✓	✓	✓	✓					
	11	✓	✓	✓	✓					
	12	✓	✓	✓	✓					
	13	✓	✓	✓	✓					
	14	✓	✓	✓	✓					
	15	✓	✓	✓	✓					
	16	✓	✓	✓	✓					
	17	✓	✓	✓	✓					
	18	✓	✓	✓	✓					
	19	✓	✓	✓	✓					
	20	✓	✓	✓	✓					
	21	✓	✓	✓	✓					
	22	✓	✓	✓	✓					
	23	✓	✓	✓	✓					

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 4900-0009

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____

Signature _____

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Application Number	Filed
11911879	2008-03-27

First Named Inventor: Jin-Seung CHOI

Art Unit	Examiner
2698	Kuo-Kong Woo

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- ☑ attorney or agent of record. Registration number 45307.
- ☐ attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

/Yoon S. Ham/
Signature

Yoon S. Ham
Typed or printed name

703-535-7340
Telephone number

2013-04-09
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Docket No.: 4900-0009 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
Jin-Seung CHOI et al.	:	Confirmation No. 2595
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2698
Filed: March 27, 2008	:	Examiner: Woo, Kuo-Kong

For: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

PRE APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop **AF**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the final rejection dated February 19, 2013, it is respectfully submitted that the Office has erred in rejecting:

1) Claims 1, 3, 5-9, and 11-16 under 35 U.S.C. 103(a) as being unpatentable over Clapper (US Pat. No. 6,024,241) in view of Takahashi et al. (US Pat. Appl. Pub. No. 2004/0229656; hereinafter "Takahashi").

2) Claims 2 and 17 under 35 U.S.C. 103(a) as being unpatentable over Clapper and Takahashi as applied to claim 1, and further in view of Haruki (US Pat. Appl. Pub. No. 2002/0135680).

3) Claims 4, 10, and 18-23 under 35 U.S.C. 103(a) as being unpatentable over Clapper and Takahashi as applied to claim 1, and further in view of Basir (US Pat. Appl. Pub. No. 2006007755).

I. REJECTION OF CLAIMS 1, 3, 5-9, and 11-16

1. The Applied References Fail to Disclose or Suggest Transmitting the Second Image Data to Another Terminal.

Claims 1 and 15 recite in part "transmitting the second image data … to another terminal" (emphasis added). The Office alleges that Clapper discloses, inter alia, the step of "transmitting the second image data … to another terminal" (emphasis added). The Office cites col. 5, lines 49-51 and 59-62 of Clapper in relation to this limitation (Final Office Action, page 3, last paragraph). However, the cited portions of Clapper do not mention anything related to transmitting data to another terminal.

Col. 5, lines 49-51 of Clapper read as follows:

> *"… 110, a plurality of physical landmarks such as streets 116, and a plurality of points 114 which include recorded landmark multimedia data. A circle or other icon 118 may be …"*

Col. 5, lines 59-62 of Clapper reads as follows:

> *"… determine the location of the various frames. In addition, the map mode may serve as a guide to assist the user in cycling through the various points landmarks and to understand their physical association with one another."*

The last paragraph of page 3 of the Final Office Action reads as follows:

> *"(d) A step of transmitting the second image data (Col. 5: 49-51,**a plurality of physical landmarks (second images)** such as streets 116, and a plurality of points 114, which include recorded landmark multimedia data), the second image data including the first image data and the location data, to another terminal and providing a location-based service(Col. 5:59-62, the map mode may serve as a guide to assist the user in cycling through the various points landmarks and to understand their physical association with **one another(another terminal))** to the another terminal using the location data of the second image data" (emphasis added).*

It appears that the Office is equating the "plurality of physical landmarks" disclosed in col. 5, line 49 of Clapper with the claimed "second image data," and the "one another" disclosed in col. 5, line 62 of Clapper with the claimed "another terminal."

First, it is improper to interpret ~~the claimed "second image data" is not~~ "a plurality of physical landmarks~~";~~" as the claimed "second image data." T~~rather, t~~he claimed "second image data" is an image data that is generated by "inserting the received location data into the first image data" (emphasis added). There is no teaching or suggestion in Clapper that "a plurality of physical landmarks" is presented as image data, much less an image data that is generated by "inserting the received location data into the first image data" as presently claimed.

Second, the "one another" disclosed in col. 5, line 62 of Clapper is referring to the "various points landmarks" disclosed in col. 6, line 61 of Clapper; it clearly does not read on the

claimed "another terminal."

Furthermore, Clapper, in its entirety, fails to disclose or suggest "transmitting the second image data, the second image data including the first image data and the location data, to another terminal" (emphasis added).

2. The Applied References Fail to Disclose or Suggest Prompting a User to Choose Whether or Not to Insert the Received Location Data into the First Image Data to Generate a Second Image Data.

Claims 1 and 15 recite in part "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data" (emphasis added). The Office concedes Clapper fails to disclose the recited limitation (Final Office Action, page 4, first paragraph). The Office alleges that "Takahashi provides motivation to one skilled in the art at time of invention to modify the Clapper teaching to insert location data into image and send to cellular phone b as to arrive at claimed invention." (Final Office Action, page 4, fourth paragraph). To support this contention, the Office points to two unrelated functions of Takahashi~~'s invention~~: a playback function disclosed in paragraph 68, further illustrated by Steps S40, S42, and S44 of Fig. 13 (Final Office Action, page 4, second paragraph); and a positional data insertion function disclosed in paragraph 94, further illustrated by Fig. 19 (Final Office Action, page 4, third paragraph).

Paragraph 68 of Takahashi reads as follows:

> *"Next, the operation of the cellular phone according to the above second embodiment will be explained. FIG. 13 is a flowchart explaining the operation of the cellular phone which displays the images in the second embodiment. When the image browsing function is activated in the cellular phone 1, the image is displayed (Step S40), the operation will be in* ***a waiting state waiting for the keystroke including the function key*** *afterwards (Step S42). Next, the operation judges* ***whether or not the function key (playback key) has been depressed*** *(Step S44). When the function key has not been depressed, the operation progresses to other processing." (emphasis added)*

Paragraph 94 of Takahashi reads as follows:

> *"Fig. 19 is a conceptual diagram showing the configuration of the system operation of the fourth embodiment. The cellular phones 3a, 3b comprise a function to receive the latitude and longitude information of each of the neighboring base transceiver stations 53, 53 wherein the latitude an longitude is transmitted from the a plurality of neighboring base transceiver stations 53, 53, and to receive the latitude and longitude information received from a plurality of geodesic satellites 50, 50 (two in FIG. 19) connected with the cellular phone. Furthermore, the cellular phones 3a, 3b comprise* ***a function to obtain a self-position*** *by receiving compensation information replies from the above-mentioned plurality of neighboring base transceiver stations 53, 53 by transmitting the compensation information to the above-mentioned plurality of neighboring base transceiver stations 53, 53. The cellular phone 3a has an image pick-up function by a pick-up device. Furthermore, the cellular phone 3a has* ***a function to insert the positional information of a***

> ***photographic location into an image file*** *and to transmit the image file by attachment in an E-mail to the cellular phone 3b through the base transceiver station 53 via the mail server 521 of the communications service provider 52. The communication service provider 52 consists of the main system 520, the mail server 521, the Web server 522, the switchboard 523 and the router 524, and manages the wireless communications network, and is also the Internet Service Provider (ISP)." (emphasis added)*

It appears that the Office is interpreting the "waiting state" disclosed in paragraph 68 lines 7-8 of Takahashi to read on the claimed limitation of "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data" (emphasis added). First, the "waiting state" of Takahashi does not disclose or suggest ~~any~~ prompting ~~of~~ the user; Applicant submits that "waiting" and "prompting" are clearly different. Second, the "waiting state" of Takahashi is waiting for a user to invoke a "playback function" (paragraph 68, line 9; see also paragraph 69). The "playback function" of Takahashi is different from and irrelevant to the claimed function of "choos[ing] whether or not to insert the received location data into the first image data to generate a second image data." Also, the "playback function" of Takahashi disclosed in paragraph 68 is completely unrelated to the positional data insertion function disclosed in paragraph 94.

Takahashi fails to disclose or teach "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data." Therefore, Takahashi fails to cure the deficiencies of Clapper.

For the above reasons, independent claims 1 and 15 are patentable over the applied art of record.

Dependent claims 3, 5-9, 11-14 and 16, depending inter alia from independent claims 1, 9, and 17, respectively, and including further patentable features, are considered patentable at least for these features and/or the reason(s) advanced with respect to the respective independent claims.

II. REJECTION OF CLAIMS 2, 4, 10, 17-23

~~3. The Applied References Similarly Fail to Disclose or Suggest the Elements Recited in Claims 2, 4, 10, 17-23.~~

Claims 2, 4, 10, 17-23 depend from claim 1 or 15 and the Office erred in rejecting those claims for at least the reasons set forth above.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
LOWE HAUPTMAN HAM & BERNER, LLP

/Yoon S Ham/
Yoon S Ham
Registration No. 45,307

2318 Mill Road, Suite 1400
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: **April 9, 2013**

YSH/YHL/jr

PTO/SB/31 (09-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): 4900-0009

I hereby certify that this correspondence is being facsimile transmitted to the USPTO EFS-Web transmitted to the USPTO, or or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____

Signature _____

Typed or printed name _____

In re Application of: Jin-Seung CHOI

Application Number	Filed
11911879	2008-03-27

For: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

Art Unit	Examiner
2698	Kuo-Kong WOO

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ 800

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is: $ _____

☐ A check in the amount of the fee is enclosed.

☑ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 07-1337 .

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☑ attorney or agent of record. Registration number 45307.

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34. _____

/Yoon S. Ham/
Signature

Yoon S. Ham
Typed or printed name

703-535-7340
Telephone number

2013-04-09
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The information provided by you in this form will be subject to the following routine uses:

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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Electronic Patent Application Fee Transmittal

Application Number:	11911879
Filing Date:	27-Mar-2008
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Filer:	Yoon Ham/james rhee
Attorney Docket Number:	4900-0009

Filed as Large Entity

U.S. National Stage under 35 USC 371 Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Notice of Appeal	1401	1	800	800
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**800**

Electronic Acknowledgement Receipt

EFS ID:	15473206
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/james rhee
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Attorney Docket Number:	4900-0009
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Payment was successfully received in RAM	$800
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Reply Brief Filed	130409_0009_pre-appeal_request.pdf	232239 b4c06562be037ad93705f24de81cfaf88c329ff7	no	2
Warnings:					
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4	Fee Worksheet (SB06)	fee-info.pdf	29996 4b7e264fd2154002932a6e9db680c66ca2de436c	no	2
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 05/29/2013
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WOO, KUO-KONG	
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05/29/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Panel Decision from Pre-Appeal Brief Review	Application No. 11/911,879	Applicant(s) CHOI ET AL.
	Examiner KENT CHANG	Art Unit 2698

This is in response to the Pre-Appeal Brief Request for Review filed 09 April, 2013.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
☐ The request does not include reasons why a review is appropriate.
☐ A proposed amendment is included with the Pre-Appeal Brief request.
☐ Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

☒ The panel has determined the status of the claim(s) is as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: *1-23*.
Claim(s) withdrawn from consideration: _____.

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) *KENT CHANG (SPE)*.	(3) *Kuo Woo*.
(2) *Daniel Swerdlow(TQAS)*.	(4)_____.

	/Daniel Swerdlow/ TQAS, TC 2600	/Kent Chang/ Supervisory Patent Examiner Art Unit 2698

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Jin-Seung Choi et al.	:	Confirmation No.: 2595
	:	
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2698
	:	
Filed: March 27, 2008	:	Examiner: WOO, KUO-KONG

For: Location-Based Service Method and System Using Location Data Included in Image Data

Commissioner for Patents
U.S. Patents and Trademarks Office

Attn: PATENT TRIAL AND APPEAL BOARD

APPEAL BRIEF UNDER 37 C.F.R. § 41. 37

This Appeal Brief under *37 CFR 41.37* concerns the appeal under *35 U.S.C. § 134* from the Examiner's Final Office Action dated February 19, 2013 (hereinafter the "Final Office Action") by the notice of appeal filed April 9, 2013 under *37 CFR 41.31*.

This Appeal Brief is timely as it was filed, with no extension fee required, within one month from the Pre-Brief Appeal Conference decision dated May 29, 2013. No fee is required for this Appeal Brief under *37 CFR 41.37(a)*.

The Board has jurisdiction under *35 U.S.C. § 134(a)*.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is SK Telecom Co., Ltd., the assignee of each inventor's entire interest as recorded at Reel/Frame No. 020711/0894.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

III. SUMMARY OF CLAIMED SUBJECT MATTER

For the purpose of this appeal brief only, a concise explanation of the subject matter defined in each of the rejected independent claims will be provided herein below with references to the specification in the record by page and line number or by paragraph number, and to the drawings by reference characters.

References below are to the Specification and drawings filed October 18, 2007.

Independent Claim 1

The subject matter of independent claim 1 is directed to a location-based service method (***Fig. 2***) using image data provided by a terminal (***Fig. 1; Fig. 3b, 30***) equipped with a camera (***Fig. 1, 40***), and using location data that includes location information of the terminal (***page 4, paragraph 24***), comprising:

(a) a step of generating first image data with the terminal at a predetermined location (***Fig. 2, S206; page 4, paragraph 27***);

(b) a step of receiving location data of the predetermined location (***page 4, paragraph 26***);

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data (***Fig. 2, S206-S210, page 4, paragraph 29***); and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data (***page 5, paragraph 30***).

Independent Claim 15

The subject matter of independent claim 15 is directed to a terminal (***Fig. 1; Fig. 3b, 30***), the terminal configured to receive location data (***page 4, paragraph 25***), comprising:

a camera section (***Fig. 1, 40***) for generating a first image data at a predetermined location (***page 3, paragraph 23***);

a location data processing section (***Fig. 1, 50***) for prompting a user to choose whether or not to insert the location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the location data into the first image data to generate a second image data (***page 4, paragraph 29***); and

an image data storing section (***Fig. 1, 70***) for receiving and storing the second image data (***page 4, paragraph 27***); and

a transmitting section (***Fig. 1, 80***) for transmitting the second image data, the second image data including the first image data and the location data, to another terminal, so that a location-based service is provided to the another terminal using the location data of the second image data (***page 5, paragraph 30***).

IV. ARGUMENT

A. First Ground of Rejection

35 U.S.C. 103(a) rejection of claims 1, 3, 5-9 and 11-16 as being unpatentable over Clapper (US 6,023,241) in view of Takahashi et al. (US 2004/0229656)

Whether claimed subject matter would have been obvious at the time of invention to one of ordinary skill in the pertinent art is a question of law based on underlying facts. *Graham* v. *John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966). The relevant factual inquiries include (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations…." *Id.* Rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v.Teleflex Inc.*, 550 U.S. at 417, 82 USPQ2d at 1396.

Independent Claim 1

Independent claim 1 recites:

> 1. A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:
> (a) a step of generating first image data with the terminal at a predetermined location;
> (b) a step of receiving location data of the predetermined location;
> (c) a step of ***prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data*** and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and
> (d) a step of *transmitting* ***the second image data, the second image data including the first image data and the location data, to another terminal*** and providing a location-based service to the another terminal using the location data of the second image data.

The rejection of claim 1 is respectfully traversed for at least the following reasons.

a. *Clapper* Fails to Disclose or Suggest "Transmitting the ***Second Image Data*** to ***Another Terminal***."

Claim 1 recites, among other features, "transmitting the second image data ... to another terminal" (emphasis added). *Clapper* fails to disclose or suggest the recited claim language.

The Examiner cites col. 5, lines 49-51 and 59-62 of *Clapper* in relation to this claim feature (Final Office Action, page 3, last paragraph). However, the cited portions of *Clapper* do not mention anything related to transmitting second image data to another terminal, as detailed below.

Clapper states

> "In a mapping mode, instead of displaying the digital frame, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks such as streets 116, and a plurality of points 114 which include recorded landmark multimedia data. A circle or other icon 118 may be provided to indicate the point which is currently the subject of the ongoing multimedia display." *Clapper at* col. 5, lines 49-51.

It appears that the Examiner is equating the "plurality of physical landmarks ...116, and a plurality of points 114 which include recorded landmark multimedia data" of *Clapper* with the claimed "second image data." However, the claimed "second image data" is image data that is generated by "inserting the received location data into the first image data" (claim 1, at step (c)). The Examiner alleges that the claimed "first image data" is disclosed by *Clapper* at image 108 in Fig. 7 (Final Office Action, page 3, line 1). Thus, by the Examiner's own rationale, any second image data that *Clapper* might disclose must include image 108 and the received location data. Because the *Clapper* physical landmarks 116 and points 114 (which the Examiner equates to second image data) do not include image 108 (which the Examiner equates to first image data), the Examiner's interpretation of the reference is inconsistent and the rejection, as a whole, fails to amount to a clear articulation of the reason(s) why the claimed invention would have been obvious. Therefore, *Clapper* fails to disclose or suggest the recited claim language.

Clapper further states "[i]n addition, the map mode may serve as a guide to assist the user in cycling through the various points landmarks and to understand their physical association with one another." *Clapper at* col. 5, lines 59-62. It appears that the Examiner is equating the "one another" disclosed in col. 5, line 62 of *Clapper* with the claimed "another terminal." However, the "one another" of *Clapper* is clearly referring to the "various points landmarks" disclosed in col. 5, line 61 of *Clapper*; it clearly does not read on the claimed "another terminal." Therefore, *Clapper* further fails to disclose or suggest the recited claim language.

Furthermore, *Clapper*, in its entirety, fails to disclose or suggest "transmitting the second image data, the second image data including the first image data and the location data, to another terminal" (emphasis added).

b. *Takahashi* Fail to Disclose or Suggest "***Prompting a User to Choose*** Whether or Not to Insert the Received Location Data into the First Image Data to Generate a Second Image Data and, If the User Chooses to Do So, ***Inserting the Received Location Data into the First Image Data to Generate a Second Image Data***."

Claim 1 recites, among other features, "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data" (emphasis added).

The Examiner concedes *Clapper* fails to disclose the recited feature (Final Office Action, page 4, first paragraph). The Examiner alleges that "*Takahashi* provides motivation to one skilled in the art at time of invention to modify the *Clapper* teaching to insert location data into image and send to cellular phone b as to arrive at claimed invention." (Final Office Action, page 4, fourth paragraph) To support this contention, the Examiner points to two unrelated functions of *Takahashi*, as detailed below.

First, the Examiner states that the claimed "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data" is disclosed

in paragraph 68 of *Takahashi*, further illustrated by Steps S40, S42, and S44 of Fig. 13 of *Takahashi* (Final Office Action, page 4, second paragraph).

Takahashi states

> "Next, the operation of the cellular phone according to the above second embodiment will be explained. FIG. 13 is a flowchart explaining the operation of the cellular phone which displays the images in the second embodiment. When the image browsing function is activated in the cellular phone 1, the image is displayed (Step S40), the operation will be in **a waiting state waiting for the keystroke including the function key** afterwards (Step S42). Next, the operation judges **whether or not the function key (playback key) has been depressed** (Step S44). When the function key has not been depressed, the operation progresses to other processing." *Takahashi* at paragraph 68 (emphasis added).

It appears that the Examiner is interpreting the "waiting state" of *Takahashi* to read on the claimed feature of "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data" (emphasis added). However, the "waiting state" of *Takahashi* does not disclose or suggest any prompting of the user. Appellant submits that "waiting" and "prompting" are clearly different. Further, the "waiting state" of Takahashi is waiting for a user to invoke a "playback function." The "playback function" of *Takahashi* is different from and irrelevant to the claimed feature of "choos[ing] whether or not to insert the received location data into the first image data to generate a second image data." Therefore, *Takahashi* fails to disclose or suggest the recited claim language.

Second, the Examiner further states that the claimed "inserting the received location data into the first image data to generate a second image data prompting a user to choose whether or not" is disclosed in paragraph 94 of *Takahashi*, further illustrated by Fig. 19 (Final Office Action, page 4, third paragraph).

Takahashi further states

> "Fig. 19 is a conceptual diagram showing the configuration of the system operation of the fourth embodiment. The cellular phones 3a, 3b comprise a function to receive the latitude and longitude information of each of the neighboring base transceiver stations 53, 53 wherein the latitude an longitude is transmitted from the a plurality of neighboring base transceiver stations 53, 53, and to receive the latitude and longitude information received from a plurality of geodesic satellites 50, 50 (two in FIG. 19) connected with the cellular phone. Furthermore, the cellular phones 3a, 3b comprise **a function to obtain a self-position** by receiving compensation information replies from the above-mentioned plurality of neighboring base transceiver stations 53, 53 by transmitting the compensation information to the above-mentioned plurality of neighboring base transceiver stations 53, 53. The cellular phone 3a has an image pick-up function by a pick-up device. Furthermore, the cellular phone 3a has **a function to insert the positional information of a photographic location into an image file** and to transmit the image file by attachment in an E-mail to the cellular phone 3b through the base transceiver station 53 via the mail server 521 of the communications service provider 52. The communication service provider 52 consists of the main system 520, the mail server 521, the Web server 522, the switchboard 523 and the router 524, and manages the wireless communications network, and is also the Internet Service Provider (ISP)." *Takahashi* at paragraph 94 (emphasis added).

It appears that the Examiner is regarding that the "waiting state" disclosed in paragraph 68, lines 7-8 of *Takahashi* as waiting for a user to invoke the positional data insertion function disclosed in paragraph 94. However, the *Takahashi* "waiting state" is not waiting for a user to invoke the "positional data insertion function," but waiting for the user to invoke the "playback function" as disclosed in *Takahashi* at paragraph 68, line 9. The *Takahashi* "positional data insertion function" is not at all related to the "waiting state." *Takahashi* fails to disclose or teach or even suggest "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data." Therefore, *Takahashi* fails to cure the deficiencies of *Clapper*.

For any of the reasons advanced above, the obviousness rejection of independent claim 1 is clearly erroneous and should be reversed.

Dependent claims 3, 5-9 and 11-14, depending *inter alia* from independent claim 1, are considered patentable at least for the reason(s) advanced with respect to independent claim 1.

Independent claim 15 includes one or more features similar to the feature(s) discussed with respect to claim 1, and is patentable over the applied art of record for at least the relevant reason(s) detailed with respect to claim 1.

Dependent claim 16, depending *inter alia* from independent claim 15, are considered patentable at least for the reason(s) advanced with respect to independent claim 15.

Claim 3

Claim 3 recites:

> 3. The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:
> (d1) a step of ***selecting the map providing service***;
> (d2) a step of transmitting a service request signal and the location data to a map providing system; and
> (d3) a step wherein the map providing system provides a map corresponding to the location data.

The rejection of claim 3 is respectfully further traversed for at least the following reasons.

a. *Clapper* Fails to Disclose or Suggest "a step of ***selecting the map providing service***."

Claim 3 recites, among other features, "a step of selecting the map providing service" (emphasis added). *Clapper* fails to disclose or suggest the recited claim language.

The Examiner cites col. 5, lines 34-36 of *Clapper* in relation to this claim feature (Final Office Action, page 4, last paragraph). However, the cited portions of *Clapper* do not mention anything related to selecting the map providing service, as detailed below.

Clapper states

> "Next, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark." *Clapper at* col. 5, lines 34-36.

It appears that the Examiner is construing the digital map of *Clapper* is displayed after selecting a map providing service. However, none of the cited teachings of *Clapper* teach or disclose the claimed selecting.

Col. 5, lines 34-36 of *Clapper* merely discloses a digital map which may be displayed. This teaching is not readable on the claimed feature "a step of selecting the map providing service." The cited disclosure of *Clapper* is silent in disclosing or teaching the claimed features of selecting. Thus, *Clapper*, as applied in the Final Office Action, does not teach or disclose the claim feature at issue. Appellant respectfully submits that claim 3 is separately patentable over the references as applied by the Examiner.

Claim 5

Claim 5 recites:

> 5. The location-based service method according to claim 3, further comprising the step of ***selecting a type of the map, after the step (d1)***.

The rejection of claim 5 is respectfully further traversed for at least the following reasons.

a. *Clapper* Fails to Disclose or Suggest "the step of ***selecting a type of the map, after the step (d1)***."

Claim 5 recites, among other features, "comprising the step of selecting a type of the map, after the step (d1)" (emphasis added). *Clapper* fails to disclose or suggest the recited claim language.

The Examiner cites col. 5, lines 53-55 of *Clapper* in relation to this claim feature (Final Office Action, page 4, third paragraph). However, the cited portions of *Clapper* do not

mention anything related to selecting a type of the map, after the step of selecting the guiding service, as detailed below.

Clapper states

> "Thus, while the audio and video associated with a particular point is being displayed, **a corresponding map depiction can be selected** which shows the location of the point where the video was captured in some embodiments. Thus, the user can switch back and forth from the display mode to the map mode to determine the location of the various frames." *Clapper at* col. 5, lines 53-59. (emphasis added).

It appears that the Examiner is equating the "a corresponding map depiction can be selected which shows the location of the point where the video was captured in some embodiments" of *Clapper* with the claimed "selecting a type of the map." However, the claimed "selecting a type of the map" is to select a type of the map, not to select a depiction of the map. To one ordinarily skilled in the art, "selecting a type of the map" is understood as selecting a style or format of the map, e.g., a satellite map, road map, or air map. On the contrary, selecting the depiction of the map is understood as selecting an object to be shown or not shown. Therefore, *Clapper* fails to disclose or suggest the recited claim language of claim 5. Appellant respectfully submits that claim 5 is separately patentable over the references as applied by the Examiner.

Conclusion

For the extensive reasons shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 1, 3, 5-9 and 11-16 be reversed.

B. Second Ground of Rejection

35 U.S.C. 103(a) rejection of claims 2 and 17 as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Haruki (US 2002/0135680)

The deficiencies of *Clapper* and *Takahashi* are discussed above. Furthermore, *Haruki* is not applied by the Examiner in a manner sufficient to remedy the deficiencies of *Clapper* and *Takahashi*. Thus, independent claims 1 and 15 are patentable over the applied art of record.

Dependent claims 2 and 17, depending *inter alia* from independent claim 1 or 15, are considered patentable at least for the reason(s) advanced with respect to the respective independent claims.

Claim 2

Claim 2 recites:

> 2. The location-based service method according to claim 1, further comprising: (c1) a step of compressing and storing the second image data, after the step (c).

The rejection of claim 2 is respectfully further traversed for at least the following reasons.

a. *Haruki* Fails to Disclose or Suggest "the step of ***compressing and storing the second image data, after the step (c)***."

Claim 2 recites, among other features, "compressing and storing the second image data, after the step (c)" (emphasis added). The Examiner concedes *Clapper* and *Takahashi* fail to disclose the recited feature (Final Office Action, page 8, first paragraph). The Examiner alleges that *Haruki* remedy the deficiencies of *Clapper* and *Takahashi*. To support this contention, the Examiner cites paragraph [32] of *Haruki* in relation to this claim feature (Final Office Action, page 8, second paragraph). However, the cited portions of *Haruki* do

not mention anything related to compressing and storing the second image data, after the step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data, as detailed below.

Haruki states

> "Referring to FIG. 1, if a tourist presses a shutter button 32 of the digital camera 10 at an arbitrary location, a system controller 30 applies a photographing command to an image censor 12, and detects a present location and a present time, respectively by a GPS apparatus 24 and a clock circuit 30a. The image censor 12 in receipt of the photographing command photographs an object, and outputs a photographed image signal. The outputted photographed image signal is subjected to a signal process such as a JPEG compression process, etc. by a signal processing circuit 14, and a compressed image signal is thereby generated. The system controller 30 **creates an image file including the compressed image signal** generated by the signal processing circuit 14, the location information and the time information detected by himself, and his own camera ID within a memory card 18." *Haruki* at paragraph 10. (emphasis added).

It appears that the Examiner is equating the "creates an image file including the compressed image signal" of *Haruki* with the claimed "compressing and storing the second image data." However, the claimed "the second image data" includes the received location data and the first image data that is generated by "inserting the received location data into the first image data" (claim 1, at step (c)). *Haruki* merely discloses "creates an image file including the compressed image signal." In *Haruki*, there is no disclosure related to compressing location data with image data. Therefore, *Haruki* fails to remedy the deficiencies of *Clapper* and *Takahashi*, and the applied references fail to disclose or suggest the recited claim language of claim 2. Appellant respectfully submits that claim 2 is separately patentable over the references as applied by the Examiner.

Claim 17 includes one or more features similar to the feature(s) discussed with respect to claim 2, and is patentable over the applied art of record for at least the relevant reason(s) detailed with respect to claim 2.

Conclusion

For the reason shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 2 and 17 be reversed.

C. Third Ground of Rejection

35 U.S.C. 103(a) rejection of claims 4, 10 and 18-23 as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Basir (US 2006/007755)

The deficiencies of *Clapper* and *Takahashi* are discussed above. Furthermore, *Basir* is not applied by the Examiner in a manner sufficient to remedy the deficiencies of *Clapper* and *Takahashi*. Thus, independent claims 1 and 15 are patentable over the applied art of record.

Dependent claims 4, 10 and 18-23, depending *inter alia* from independent claim 1 or 15, are considered patentable at least for the reason(s) advanced with respect to the respective independent claims.

Conclusion

For the reason shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 4, 10 and 18-23 be reversed.

Conclusion

Each of the Examiner's rejections has been traversed. Accordingly, Appellant respectfully submits that all claims on appeal are considered allowable. Accordingly, reversal of the Examiner's Rejection is believed appropriate and courteously solicited.

If for any reason this Appeal Brief is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned, Appellant's attorney of record.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: June 28, 2013
YSH/SYK/ha

V. CLAIMS APPENDIX

1. A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location;

(b) a step of receiving location data of the predetermined location;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data.

2. The location-based service method according to claim 1, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1).

6. The location-based service method according to claim 1, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1) a step of selecting the guiding service;

(d2) a step of transmitting a service request signal and the location data to a navigation system; and

(d3) a step wherein the navigation system provides a navigation data corresponding to the location data.

7. The location-based service method according to claim 6, wherein current location data of the terminal is transmitted to the navigation system in the step (d2).

8. The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time.

9. The location-based service method according to claim 1, wherein the location data are provided by a location data providing system.

10. The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. The location-based service method according to claim 1, wherein the location data includes information on latitude and longitude of the terminal or base station.

13. The location-based service method according to claim 1, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. The location-based service method according to claim 13, wherein the digital camera includes a module for receiving the location data.

15. A terminal, the terminal configured to receive location data, comprising:

a camera section for generating a first image data at a predetermined location;

a location data processing section for prompting a user to choose whether or not to insert the location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the location data into the first image data to generate a second image data; and

an image data storing section for receiving and storing the second image data; and

a transmitting section for transmitting the second image data, the second image data including the first image data and the location data, to another terminal, so that a location-

based service is provided to the another terminal using the location data of the second image data.

16. The terminal according to claim 15, wherein the camera section is configured to receive the location data.

17. The terminal according to claim 15, further comprising a compression controller for compressing the second image data and transmitting the second image data to the image data storing section.

18. The terminal according to claim 15, wherein the location data is provided by a location data providing system using a base station or a satellite.

19. The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

20. The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS).

21. The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. The terminal according to claim 20, further comprising:

a service system for providing a service according to a user's selection based on the location data.

23. The terminal according to claim 22, wherein the service system is a map providing system or a navigation system.

Electronic Acknowledgement Receipt

EFS ID:	16191704
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Hee Jeong An
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Time Stamp:	16:28:59
Application Type:	U.S. National Stage under 35 USC 371

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1	Appeal Brief Filed	130628_4900-0009_Appeal_Brief.pdf	111126 4b6e36f14b3778f368627681362d4b0e24df7e4	no	22

Warnings:

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

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New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Application Number: 11/911,879
Filing Date: March 27, 2008
Appellant(s): Jin-Seung Choi et al.

_____
Yoon S Ham (Reg. Number 45,307)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/28/2013.

(1) Grounds of Rejection to be Reviewed on Appeal

Every ground of rejection set forth in the Office action dated 2/19/2013 from which the appeal is taken is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(2) Response to Argument

A. First Ground of Rejection

Claim 1. a: Appellant alleges that Clapper Fails to Disclose or Suggest "Transmitting the ***Second Images Data to Another Terminal***."

Examiner respectfully disagrees. Clapper discloses (**Col 5:40-62, a digital image 108 (**as first image data**), shown in FIG. 7),(In a mapping mode, instead of displaying digital frame, a map may be displayed that includes the GPS data, a plurality of physical landmarks such as streets which include recorded landmark(** second image data**) multimedia data) and (Col.7:8-9, data may be provided bi-directionally to and from the recorder) and (Col. 7:28-38, with cellular telephone link, excursion information may be downloaded from the excursion server to the recorder either by a direct modem link or over the internet)** wherein image and other data are transmitting through media (modem or internet) to another terminal for download/ upload the information.

Claim 1. b: Appellant alleges that Takahashi Fails to Disclose or Suggest "**Prompting a User to Choose** Whether or not to insert the Received Location Data into the First Image Data to generate a second Data and If the User Choose to Do So, ***Inserting the received Location Data into the First Image Data to Generate a Second Image Data."***

Examiner respectfully disagrees. Takahashi discloses **(¶44, an image file and the like inserted with the image display control information in the text chunk already to transmit)** wherein chunk is information of pictures or image.

(¶52, the image is displayed, and subsequently the operation will be in a waiting state for keystrokes containing the function key), (¶55, When the text chunk is discovered, the operation will judge whether or not the keyword has been inserted which indicates insertion of the image display control information) and (¶56, when the keyword has been inserted in the text chunk, the keyword is extracted from the image file text chunk as image display control information, and the display processing of the image is performed according to this image display control information) wherein the chuck of image information is waited to be inserted into first image information will be transmitted**. (¶53, waiting for user is not only waiting for a user to invoke the position data insertion function but also operation judges whether or not position of the pointer is the text chunk).**

The prior art recites chuck data and information is displayed and waited to be pressed and processed same function as claimed "**Prompting a User to Choose" as recited hereinbefore.**

Same reasons for rejection dependent claims 3, 5-9 and 11-14 with respect to independent claim 1.

Same reasons for rejection independent claim 15 includes similar to the features discussed with respect to claim1.

Same reasons for rejection dependent claim 16 with respect to independent claim 15.

Claim 3. Appellant alleges that Clapper Fails to Disclose or Suggest "a ***step of selecting the map providing service."***

Examiner respectfully disagrees. Clapper discloses (**Col. 6:30-36, The software may also be utilized to play prerecorded multimedia presentations recorded in the formats suitable for use with the recorder and the recorder may be coupled to a computer to access information from the Internet. Preprogrammed excursions may then be downloaded from the excursion server and stored in the storage device (user))** wherein the excursion server provides map and travel service information based on user's location and requesting.

Claim 5. Appellant alleges that Clapper Fails to Disclose or Suggest "the step of ***selecting a type of map, after the step (d1)."***

Examiner respectfully disagrees. Clapper discloses (**Col. 6:30-36, the software may also be utilized to play prerecorded multimedia presentations recorded in the formats suitable for use with the recorder)** wherein the system is selecting proper type of (format) map to be used for the device.

B. **Second Ground of Rejection**

Claim 2. Appellant alleges that Haruki Fails to Disclose or Suggest "the step of ***compressing and storing the second image data, after the step C"*** of claim 1.

Examiner respectfully disagrees. After step C of claim 1, Clapper discloses "Transmitting the Second Images Data to Another Terminal" and Takahashi discloses "**Prompting a User to Choose" and same** rejection reasons as hereafter before. Haruki disclose **(¶32,the system controller creates an image file including the compressed image signal generated by the signal processing circuit, the location information and his own camera ID within a memory card**) wherein controller compressed image information and stored in memory card as claimed.

Same reasons for rejection independent claim 17 includes similar to the features discussed with respect to claim 2.

C. **Third Ground of Rejection**

Claims 4, 10 and 18-23. Appellant alleges that Basir Fails to Disclose or Suggest without specific claimed language.

Same reasons for rejection dependent 4, 10 and 18-23.with respect to independent claims 1 and 15.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/KUO WOO/
Examiner, Art Unit 2698

Conferees:

/Kent Chang/

Supervisory Patent Examiner, Art Unit 2698

/LUN-YI LAO/

Supervisory Patent Examiner, Art Unit 2692

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Jin-Seung Choi et al.	:	Confirmation No.: 2595
	:	
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2698
	:	
Filed: March 27, 2008	:	Examiner: WOO, KUO-KONG

For: Location-Based Service Method and System Using Location Data Included in Image Data

Commissioner for Patents
U.S. Patents and Trademarks Office

Attn: PATENT TRIAL AND APPEAL BOARD

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Appellant hereby files this reply brief to the Examiner's Answer mailed August 30, 2013.

Appellant respectfully traverses all Examiner's arguments indicated in the "Grounds of Rejection" and "Response to Argument" sections of the Examiner's Answer. In the following ARGUMENT section, Appellant will address the Examiner's arguments indicated in the "Response to Argument" section *only*. Any remaining issues are believed to have been sufficiently and adequately treated in the Appeal Brief filed June 28, 2013.

STATUS OF CLAIMS

Same as Appeal Brief.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Same as Appeal Brief.

ARGUMENT

A. First Ground of Rejection

35 U.S.C. 103(a) rejection of claims 1, 3, 5-9 and 11-16 as being unpatentable over Clapper (US 6,023,241) in view of Takahashi et al. (US 2004/0229656)

Whether claimed subject matter would have been obvious at the time of invention to one of ordinary skill in the pertinent art is a question of law based on underlying facts. *Graham* v. *John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966). The relevant factual inquiries include (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations…." *Id.* Rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v.Teleflex Inc.*, 550 U.S. at 417, 82 USPQ2d at 1396.

Independent Claim 1

Independent claim 1 recites:

> 1. A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:
> (a) a step of generating first image data with the terminal at a predetermined location;
> (b) a step of receiving location data of the predetermined location;
> (c) a step of ***prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data*** and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and
> (d) a step of *transmitting* ***the second image data, the second image data including the first image data and the location data, to another terminal*** and providing a location-based service to the another terminal using the location data of the second image data.

I. The Examiner continued to hold that the claim feature "Transmitting the ***Second Image Data*** to ***Another Terminal***" is disclosed in *Clapper*. *See* Examiner's Answer at page 2, the last paragraph.

However, the Examiner failed to substantively address Appellant's argument. *See* Appeal Brief, section *a* on pages 7-8. Appellant respectfully traverses the Examiner's position.

Compared to the Final Office Action, the Examiner now clarified that he considered *Clapper* to disclose the claim feature in Col. 5: 40-62 and Col. 7: 8-9 and 28-38 of *Clapper*. *See* Examiner's Answer at page 2, last paragraph. However, Appellant respectfully submits that the cited portions of *Clapper* do not teach or disclose "Transmitting the ***Second Image Data*** to ***Another Terminal***."

Col. 5: 40-62 of *Clapper* merely discloses that a map may be displayed that includes GPS data, a plurality of physical landmarks such as streets, and a plurality of points which include recorded landmark (which the Examiner equates to second image data) multimedia data, ***instead*** of displaying a digital frame on which a digital image (which the Examiner equates to first image data) is displayed. The teachings regarding the cited portions of *Clapper* could be interpreted, at best and if at all, as displaying the map without displaying the digital image. According to the cited portions of *Clapper*, displaying the map including the recorded landmark data is clearly distinguished and separated from displaying the digital image. Because the map of *Clapper* is displayed *instead of* the digital image, the map's recorded landmark data (which the Examiner equates to second image data) is not included in the digital image (which the Examiner equates to first image data). Therefore, the cited portions of *Clapper* do not teach or disclose not only the claimed "second image data" which is image data that is generated by "inserting the received location data into the first image data" (claim 1, at step (c)), but also transmitting the second image data to another terminal as presently claimed.

Accordingly, Appellant respectfully submits that the Examiner's position with respect to the claim feature at issue is flawed, both legally and factually.

II. The Examiner continued to hold that the claim feature "***prompting a user to choose*** whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, ***inserting the received location data into the first image data to generate a second image data***" is disclosed in *Takahashi*. *See*

Examiner's Answer at page 3. Appellant respectfully traverses the Examiner's position for similar reasons to those detailed in section I of this Reply Brief, i.e., the Examiner still failed to substantively address Appellant's argument.

Compared to the Final Office Action, the Examiner additionally cited paragraphs 0044, 0052, 0053, 0055 and 0056 of *Takahashi* in support of his position that the claim feature is disclosed in *Takahashi*. *See* Examiner's Answer, at page 3, the 2nd and 3rd paragraphs. Appellant respectfully submits that the cited portions of *Takahashi* do not teach or disclose the claim feature at issue, i.e., "***prompting a user to choose*** whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, ***inserting the received location data into the first image data to generate a second image data***" for two reasons.

Takahashi states

> "...the operation will be in a *waiting state* for keystrokes containing the function key (Step S12). Next, the operation judges whether or not the function key (playback) has been depressed (Step S14)....when the function key (playback) is depressed, the operation places the pointer at the top of the image file chunk corresponding to the image currently displayed..." *Takahashi* at paragraphs 52-53 (emphasis added).
>
> "...When the text chunk is discovered, the operation will judge whether or not the keyword has been inserted which indicates insertion of *the image display control information*...the display processing of the image is performed according to this image display control information..." *Takahashi* at paragraphs 55-56 (emphasis added).

First, paragraphs 0052-0053 of *Takahashi* disclose the waiting state for depressing of the function key. In *Takahashi*, it is disclosed that when the function key has not been depressed, the operation of the cellular phone progresses to other processing, but when the function key has been depressed, the pointer is moved to discover the keyword (image display control information) of the text chunk and the cellular phone performs according to the discovered keyword. The examples of performing of the cellular phone according to the keyword are shown in Figs. 8-10 of *Takahashi*. The disclosures and teachings regarding the waiting state in the cited portions of *Takahashi* could be interpreted, at best and if at all, as waiting for a *display control* command. However, the cited portions do not teach or disclose that the received location data is ***inserted*** to the first image data according to the user's

choosing, as presently claimed. *Takahashi* controls a display status according to the user's input (e.g., an image is scrolling automatically, and an image is enlarged gradually), rather than "inserting the received location data into the first image data to generate a second image data" according to the user's input.

Second, as to paragraphs 0055-0056 of *Takahashi,* Appellant respectfully traverses the Examiner's position for the similar reasons detailed with respect to claim 1 in section I of this Reply Brief, i.e., the cited portions of *Takahashi* fail to teach or disclose "second image data" as presently claimed, and also fail to remedy the deficiency of *Clapper*. *Takahashi* merely describes the image display control information inserted in the text chunk (paragraph [0056]), i.e., in *Takahashi*, information is inserted into ***text*** data. In contrast, the claimed subject matter recites that location data is inserted into ***image*** data. In *Takahashi*, there is no disclosure related to the "second image data" which is image data that is generated by "inserting the received location data into the first image data" (claim 1, at step (c)). Thus, deductively, *Takahashi* fails to disclose or teach "*inserting the received location data into the first image data to generate a* ***second image data***" and "*prompting a user to choose whether or not to insert the received location data into the first image data to generate a* ***second image data.***"

Accordingly, Appellant respectfully submits that the Examiner's position with respect to the claim feature at issue is flawed, both legally and factually.

Independent claim 1 is clearly patentable over *Clapper* and *Takahashi* as applied by the Examiner.

Claim 3

Claim 3 recites:

> 3. The location-based service method according to claim 1, wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:
> (d1) a step of ***selecting the map providing service***;
> (d2) a step of transmitting a service request signal and the location data to a map providing system; and
> (d3) a step wherein the map providing system provides a map corresponding to the location data.

III. Compared to the Final Office Action, the Examiner additionally cited Col. 6:30-36 of *Clapper* in support of his position that the claimed "selecting the map providing service" is disclosed in *Clapper*. *See* Examiner's Answer, at page 4, lines 9-15. Appellant respectfully disagrees. The cited portions of *Clapper* do not mention anything related to selecting the map providing service, as detailed below.

Clapper states:

> "The software illustrated in FIG. 9 may also be utilized to play prerecorded multimedia presentations recorded in the formats suitable for use with the recorder 10. For example, the recorder 10 may be coupled to a computer 36 to access information from the Internet 40. Preprogrammed excursions may then be downloaded from the excursion server 42 and stored in the storage device 32" *Clapper* at Col.6: 30-36 (emphasis added).

It appears that the Examiner is construing that the preprogrammed excursions of *Clapper* are downloaded in response to a user's selection. However, none of the cited teachings of *Clapper* teach or disclose the claimed selecting.

Col. 6, lines 30-36 of *Clapper* merely discloses the preprogrammed excursions downloaded from the excursion server. This teaching is not readable on the claim feature "a step of selecting the map providing service." The cited disclosure of *Clapper* is silent in disclosing or teaching the claim feature of "selecting the map providing service." Thus, the additionally cited portion of *Clapper* still does not teach or disclose the claim feature at issue. Appellant respectfully submits that claim 3 is separately patentable over the references as applied by the Examiner.

Claim 5

Claim 5 recites:

> 5. The location-based service method according to claim 3, further comprising the step of ***selecting a type of the map, after the step (d1)***.

IV. Compared to the Final Office Action, the Examiner additionally cited Col. 6:30-36 of *Clapper* in support of his position that the claimed "selecting a type of the map, after the step (d1; "selecting the map providing service" of claim 3) is disclosed in *Clapper*. *See* Examiner's Answer, at page 4, lines 1-4 from the bottom. Appellant respectfully disagrees. The cited portions of *Clapper* do not mention anything related to selecting a type of the map, *after* the step of selecting the guiding service.

The cited portion of *Clapper* merely discloses that the software may be utilized to play prerecorded multimedia presentations recorded in the formats suitable for use with the recorder. There is no disclosure related to the claimed "selecting a type of the map" which is to select a type of the map. To one ordinarily skilled in the art, utilizing the suitable formats for multimedia presentations does not inherently cover "***selecting*** a ***type*** of the ***map***." Thus, the additionally cited disclosure of *Clapper* is silent in disclosing or teaching the claim features of selecting. Accordingly, the additionally cited portion of *Clapper* still does not teach or disclose the claim feature at issue. Appellant respectfully submits that claim 5 is separately patentable over the references as applied by the Examiner.

Claims 6-9 and 11-16 are patentable for at least the reasons presented with respect to claim 1.

Conclusion

For the extensive reasons shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 1, 3, 5-9 and 11-16 be reversed.

B. Second Ground of Rejection

35 U.S.C. 103(a) rejection of claims 2 and 17 as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Haruki (US 2002/0135680)

Claim 2

Claim 2 recites:

> 2. The location-based service method according to claim 1, further comprising: (c1) a step of compressing and storing the second image data, after the step (c).

I. The Examiner continued to hold that the claim features of "*second image data*" is disclosed in the combination of *Clapper* and *Takahashi*. *See* Examiner's Answer at page 5, lines 4-6. However, as discussed above, *Clapper* and *Takahashi*, either alone or in combination, fail to disclose or teach the features of "*second image data.*" Furthermore, *Haruki* is not applied by the Examiner in a manner sufficient to remedy the deficiencies of *Clapper* and *Takahashi*. Thus, independent claims 1 and 15 are patentable over the applied art of record.

Dependent claims 2 and 17, depending *inter alia* from independent claim 1 or 15, are patentable at least for the reason(s) advanced with respect to the respective independent claims.

II. The Examiner continued to hold that the claim feature "compressing and storing the second image data, after the step (c)" is disclosed in *Haruki*. Compared to the Final Office Action, the Examiner now clarified that he considered *Haruki* to disclose the claim feature of claim 2. *See* Examiner's Answer at page 5, lines 7-10.

However, the Examiner still failed to substantively address Appellant's argument. *See* Appeal Brief, section *a* on pages 14-15. Appellant respectfully traverses the Examiner's position.

The cited portions of *Haruki* do not mention anything related to compressing and storing the second image data for two reasons.

First, Appellant respectfully traverses the Examiner's position for the similar reasons detailed with respect to claim 1 in section I of this Reply Brief, i.e., the cited portions of *Clapper* fail to teach or disclose "second image data" which is image data that is generated by "inserting the received location data into the first image data" (claim 1, at step (c)), as presently claimed. Further, *Haruki* fails to remedy the deficiency of *Clapper*, regarding the recited "second image data." Thus, deductively, *Haruki* fails to disclose or teach "compressing and storing the ***second image data***."

Second, the cited portion of *Haruki* merely discloses that a system controller creates (i) an image file including the compressed image signal generated by the signal processing circuit, (ii) the location information and (iii) the time information. Thus, the system controller of *Haruki* separately creates the compressed image file, the location information, and the time information. In *Haruki*, there is no disclosure related to compressing the second image data which includes both location data ***and*** image data. Therefore, *Haruki* fails to remedy the deficiencies of *Clapper* and *Takahashi*, and the applied references fail to disclose or suggest the recited claim language of claim 2, i.e., the claim feature of "compressing and storing the second image data." Appellant respectfully submits that claim 2 is separately patentable over the references as applied by the Examiner.

Claim 17 includes one or more features similar to the feature(s) discussed with respect to claim 2, and is patentable over the applied art of record for at least the relevant reason(s) detailed with respect to claim 2.

Conclusion

For the extensive reasons shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 2 and 17 be reversed.

C. Third Ground of Rejection

35 U.S.C. 103(a) rejection of claims 4, 10 and 18-23 as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Basir (US 2006/007755)

I. The Examiner continued to hold that the claim features of claims 4, 10 and 18-23 are disclosed in the combination of *Clapper*, *Takahashi* and *Basir*. *See* Examiner's Answer at page 5, lines 2-3 from the bottom. However, as discussed above, *Clapper* and *Takahashi*, either alone or in combination, fail to disclose or teach the features of "*second image data.*" Furthermore, *Basir* is not applied by the Examiner in a manner sufficient to remedy the deficiencies of *Clapper* and *Takahashi*. Thus, independent claims 1 and 15 are patentable over the applied art of record.

Accordingly, dependent claims 4, 10 and 18-23, depending *inter alia* from independent claim 1 or 15, are considered patentable at least for the reason(s) advanced with respect to the respective independent claims.

Conclusion

For the extensive reason shown above, Appellant respectfully requests that the rejection under *35 U.S.C. 103(a)*, as to claims 4, 10 and 18-23 be reversed.

Conclusion

Each of the Examiner's rejections has been traversed. Accordingly, Appellant respectfully submits that all claims on appeal are considered allowable. Accordingly, reversal of the Examiner's Rejection is believed appropriate and courteously solicited.

If for any reason this Brief is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned, Appellant's attorney of record.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Electronic Acknowledgement Receipt

EFS ID:	17258945
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Hee Jeong An
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
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Application Type:	U.S. National Stage under 35 USC 371

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1	Reply Brief Filed	4900-0009_REPLY_brief.pdf	80038 f3ab5853cdbe5282e519369b382ab3cd75b1f249	no	13

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 11/18/2013

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EXAMINER	
WOO, KUO-KONG	
ART UNIT	**PAPER NUMBER**
2624	

MAIL DATE	DELIVERY MODE
11/18/2013	PAPER

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Appeal No: 2014-001212
Application: 11/911,879
Appellant: Jin-Seung Choi et al.

Patent Trial and Appeal Board Docketing Notice

Application 11/911,879 was received from the Technology Center at the Board on November 04, 2013 and has been assigned Appeal No: 2014-001212.

In all future communications regarding this appeal, please include both the application number and the appeal number.

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By order of the Patent Trial and Appeal Board.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 03/22/2016

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WOO, KUO-KONG	

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JIN-SEUNG CHOI, JAE-CHUL LIM, JAE-BUM PARK, HONG-KEUN JI, JONG-HO KIM, DO-WAN KIM, HYUN-JUN OH, DONG-WON NA, and WON-HEE SULL

Appeal 2014-001212
Application 11/911,879
Technology Center 2600

Before JOHN A. JEFFERY, BRADLEY W. BAUMEISTER, and DENISE M. POTHIER, *Administrative Patent Judges*.

POTHIER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–23, which constitute all the claims pending in this application.[1] App. Br. 1. We have jurisdiction under 35 U.S.C. § 6(b). We reverse. Pursuant to our authority under 37 C.F.R. § 41.50(b), we newly reject claims 1 and 15 under 35 U.S.C § 103(a).

---

[1] Throughout this Opinion, we refer to (1) the Final Rejection (Final Act.) mailed February 19, 2013, (2) the Appeal Brief (App. Br.) filed June 28, 2013, (3) the Examiner's Answer (Ans.) mailed August 30, 2013, and (4) the Reply Brief (Reply Br.) filed October 29, 2013.

INVENTION

Appellants' invention provides location-based services using location information inserted in an image. Spec. ¶ 6. For example, location-based services include displaying a map showing the location where the image was captured. *Id.* Claim 1, reproduced below with our emphasis, is illustrative:

> 1. A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:
>
> (a) a step of generating first image data with the terminal at a predetermined location;
>
> (b) a step of receiving location data of the predetermined location;
>
> (c) a step of *prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data* and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and
>
> (d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data.

The Examiner relies on the following as evidence of unpatentability:

Clapper	US 6,023,241	Feb. 8, 2000
Haruki	US 2002/0135680 A1	Sept. 26, 2002
Takahashi	US 2004/0229656 A1	Nov. 18, 2004
Basir	US 2006/0077055 A1	Apr. 13, 2006

THE REJECTIONS

Claims 1, 3, 5–9, and 11–16 are rejected under 35 U.S.C. § 103(a) as unpatentable over Clapper and Takahashi. Final Act. 2–7.

Claims 2 and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Clapper, Takahashi, and Haruki. Final Act. 7–8.

Claims 4, 10, and 18–23 are rejected under 35 U.S.C. § 103(a) as unpatentable over Clapper, Takahashi, and Basir. Final Act. 8–10.

OBVIOUSNESS REJECTION OVER CLAPPER AND TAKAHASHI

Contentions

Claim 1 recites, in pertinent part, "prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data." The Examiner finds that Clapper teaches all of the limitations of independent claim 1 except for the steps of prompting a user and inserting the location data. Final Act. 2–4. The Examiner turns to Takahashi for these features in concluding that the claim would have been obvious. *Id.* As best understood, the Examiner finds that Takahashi prompts and waits for user input. *Id.* at 4. According to the Examiner, Takahashi's user invokes the position data insertion function while the system is waiting for the user's keystrokes. *See* Ans. 3.

Among other contentions, Appellants argue that Takahashi does not prompt a user to choose whether to insert location data. App. Br. 8–10. According to Appellants, Takahashi's waiting state does not prompt the user and is irrelevant to inserting location data. *Id.* at 9–10 (citing Takahashi ¶¶ 68, 94).

Issue

Under § 103, has the Examiner erred in rejecting claim 1 by finding that Takahashi would have taught or suggested "a step of prompting a user

to choose whether or not to insert the received location data into the first image data to generate a second image data"?

Analysis

To address the recited prompting, the Examiner relies upon Takahashi's method alone. *See* Final Act. 4 (stating that "Clapper does not explicitly disclose a step of prompting a user"); *see also* Ans. 3 (discussing only Takahashi in responding to Appellants' arguments). We, therefore, confine our discussion to Takahashi.

Takahashi waits for a user's keystroke, then performs a corresponding function. *See* Takahashi ¶ 68, *cited in* Final Act. 4; Takahashi ¶¶ 52–53, 55–56, *cited in* Ans. 3. As best understood, the Examiner finds that Takahashi's waiting state involves prompting a user. *See* Final Act. at 4. Even assuming, without deciding, that this finding is correct, the Examiner has not shown that Takahashi prompts the user to insert position data. As discussed in detail below, the Examiner cites Takahashi's first, second, and fourth embodiments. *See* Final Act. 4; Ans. 3. But none of these embodiments disclose the limitation at issue.

Takahashi's first and second embodiments (Takahashi ¶¶ 51–59, 68) lack the recited prompting. In particular, we are persuaded by Appellants' argument (App. Br. 9) that Takahashi's first and second embodiments (Takahashi ¶¶ 51–59, 68) play an image sequence without inserting location data. For example, Takahashi enlarges or scrolls an image. *See, e.g.*, *id.*, Figs. 10A–C; *id.* ¶ 64. To direct this playback, Takahashi's system waits for the user to press a key. *See id.* ¶ 68, *cited in* Final Act. 4; *see also* Takahashi ¶¶ 44, 52–53, 55–56, *cited in* Ans. 3. But the Examiner does not

cite (*see* Final Act. 4; Ans. 3), and we do not find, that Takahashi's system waits for or prompts the user to press a key to insert position data.

With respect to the fourth embodiment, the Examiner specifically points to the "System Configuration." Final Act. 4 (citing Takahashi ¶ 94). To be sure, Takahashi's fourth embodiment does insert position data in an image. Takahashi ¶ 94, *cited in* Final Act. 4. But we agree with Appellants that the Examiner has not shown that Takahashi's user is prompted before inserting this position data. App. Br. 10. In this section of the embodiment, Takahashi discloses that phone 3a "has a function to insert" a location into an image file. Takahashi ¶ 94. But Takahashi is silent with respect to a prompt or even a waiting state to do so. *Id.*

Other sections describing Takahashi's fourth embodiment (*see, e.g.*, *id.* ¶¶ 105–08) contradict the Examiner's position that a user invokes the position data insertion function during a waiting state. Ans. 3. For example, in the section "Operation of the Fourth Embodiment," Takahashi explains the flow chart in Figure 23. *Id.* ¶¶ 105–07. In this explanation, the only evidence of user input is the shutter-key operation. *Id.* There is no evidence of any intervening prompts or wait states during these steps. *See id.* Even in blocks S132 to S140 of Figure 23, Takahashi forms the image file by searching for the IHDR header (image header) without waiting for any key operation. *Compare id.* ¶ 107 (stating "operation proceeds" and "operation repeats") *with id.* ¶ 108 (stating "operation then becomes the wait state for the key operation"). Accordingly, this record does not support the Examiner's finding that Takahashi's fourth embodiment prompts a user as recited. Ans. 3.

As such, we are constrained by this record to find that the Examiner has erred in establishing that Takahashi teaches the recited prompting.

For the foregoing reasons, Appellants have persuaded us of error in the rejection of (1) independent claim 1, (2) independent claim 15, which recites similar limitations, and (3) dependent claims 3, 5–9, 11–14, and 16, for similar reasons.

THE OTHER OBVIOUSNESS REJECTIONS

We also do not sustain the Examiner's rejections of dependent claims 2, 4, 10, and 17–23 for the same reasons discussed above in connection with claim 1. The additional references—Haruki and Basir—were not relied upon to teach the recited "prompting" step that is missing from Takahashi, and, thus, do not cure the deficiency explained previously given the record. *See* Final Act. 7–9.

NEW GROUND OF REJECTION

Pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection for claims 1 and 15 under 35 U.S.C. § 103(a) as obvious over Clapper.

As described in detail below, Clapper's method of creating and providing multimedia excursions (Clapper, Figs. 7 and 9) constitutes "[a] location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal," as recited in claim 1.

Likewise, claim 15 recites the steps of claim 1 as functions performed by various descriptive "sections." We find that the recited terminal

corresponds to Clapper's terminal 10 (*see id.*, Fig. 1). The recited steps of claim 1 and terminal sections of claim 15 are discussed below.

Step (a)

Claim 1 recites "(a) a step of generating first image data with the terminal at a predetermined location." Likewise, the user in Clapper either provides an image or is prompted for an image input at blocks 82, 88, and 90 (Clapper, Fig. 6) and, in response, generates first image data. *See id.*, col. 4, ll. 53–54, 57–61, 64–66. As for the "at a predetermined location" limitation, the image is taken at a location and, thus, generated "at a predetermined location," as broadly as recited. *See id.*

For these reasons, Clapper also discloses claim 15's camera section.

Step (b)

Claim 1 further recites "(b) a step of receiving location data of the predetermined location." Clapper receives the recited "location data" as global position system (GPS) coordinates in block 86. *Id.*, col. 4, ll. 53–57 and Fig. 6. For these reasons, Clapper also discloses a terminal configured to receive location data, as recited in claim 15.

Step (c)

Claim 1 further recites "(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data."[2]

---

[2] Notably, this phrase includes a conditional limitation, "inserting the received location data into the first image data . . .," that need only be performed if the user chooses to insert location data into the image data.

Clapper teaches a prompt at block 88.[3] Clapper, Fig. 6. In particular, Clapper's block 88 leads to block 92 where GPS data may be superimposed over the first image data, generating a second image. *Id.; see also id.*, col. 4, ll. 57–67. That is, Clapper's image 108, including GPS data 110, becomes the recited second image because it is generated from the first image and the GPS location information. *Id.*; *see also id.*, Fig. 7. However, when the user is prompted for an image at block 88, there is no further prompt to choose whether or not to insert the received location data as recited.

Yet, we conclude that it would have been obvious to prompt Clapper's user to superimpose the GPS data. Specifically, Clapper provides two embodiments for inserting GPS data in an image. *See id.*, col. 4, l. 64 to col. 5, l. 7. In one embodiment, GPS data is inserted in the first image to generate a second image as discussed previously. *See id.*, col. 4, ll. 57–67. In a second embodiment, Clapper provides GPS data in a second frame separate from the first image. *Id.*, col. 5, ll. 2–7. This illustrates that Clapper teaches and has the ability to store the first image data separate from a second image data containing GPS data.

Furthermore, Clapper demonstrates that having prompts for different functionalities to solicit user input is known in the art. *See, e.g.*, *id.*, col. 4, ll. 57–59, 64–65; Fig. 6 (prompting a user for an image to be associated with GPS data); *id.*, col. 5, ll. 8–9; Fig. 6 (prompting a user for audio at block 94); *id.*, col. 4, ll. 4–9 and 25–27, Figs. 4–5 (prompting a user for an identifier). Given that Clapper teaches it was known to prompt a user for different functionalities, and given that Clapper has the ability to store a first image

[3] The Specification also discloses first image data being generated in step S206, after inquiring whether to insert the location data. Spec. ¶ 29; Fig. 2.

separate from a second image, it would have been obvious to one skilled in the art to include a prompt to ask the user whether to insert GPS data into the first image or to store it separately. For example, it would have been obvious to include such a prompt between Clapper's blocks 90 and 92 in Figure 6. This combination of Clapper's teachings would not change how a prompt works, and, therefore, would have constituted nothing more than a combination of prior art elements yielding a predictable result. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

For these reasons, the location data processing section and image data storing section in claim 15 are also taught or suggested by Clapper, as explained previously in connection with claim 1.

Step (d)

Claim 1 further recites "(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data."

Appellants' arguments regarding the transmitting step are premised on the Examiner's position that Clapper's map data (*see* App. Br. 7–8) or alternatively, Clapper's recorded landmark (*see* Reply Br. 4–5) being the second image data. These arguments, however, are moot because unlike the Examiner, we find that the second image data is the image shown in Clapper's image 108 having GPS data 110 (*see* Clapper, Fig. 7), as discussed previously.

Regarding the "transmitting" step, Clapper's terminal 10 stores the second image as multimedia data. *See id.*, col. 1, ll. 58–60, col. 3, ll. 61–67, col. 4, ll. 12–19 and 39–41, and col. 5, ll. 8–17. This multimedia data is

used in a presentation downloaded from excursion server 42 where a user can take an excursion or guided multimedia tour without a personal guide. *Id.*, col. 6, ll. 31–46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36. *See also id.*, col. 7, ll. 8–15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (*id.*, Fig. 7 (showing an image of a monument)) and the location data (*id.*, col. 4, ll. 57–67 (GPS data)) to another terminal (*id.*, Fig. 2, computer 36).

Regarding the "providing" step, Clapper provides a location-based service from the excursion server 42 in the form of a preprogrammed excursion, for example. *Id.*, col. 6, ll. 31–46. These preprogramed excursions are downloaded from server 42 to the terminal 10. *Id.* Clapper's computer 36 connects the excursion server 42 to terminal 10. *See id.*, Fig. 2. Because the downloaded excursions must pass through computer 36, Clapper's excursion server 42 provides this location-based service to another terminal (e.g., computer 36), as recited. Moreover, Clapper provides these excursions using the current GPS coordinates matched with the location data of the second image data. *See id.*, col. 6, ll. 42–46. In this way, Clapper provides "a location-based service to the another terminal using the location data of the second image data," as recited.

For these reasons, Clapper also teaches the transmitting section in claim 15.

Although we decline to reject every claim under our discretionary authority under 37 C.F.R. § 41.50(b), we emphasize that our decision does not mean that the remaining claims are necessarily patentable. Rather, we

merely leave the patentability determination of these claims to the Examiner. *See* MPEP § 1213.02.

DECISION

The Examiner's decision rejecting claims 1–23 is reversed.

Pursuant to 37 C.F.R. § 41.50(b), we enter a new ground of rejection for claims 1 and 15 under 35 U.S.C. § 103.

Section 37 C.F.R. § 41.50(b) states that "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." Furthermore, 37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

> (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

REVERSED
37 C.F.R. § 41.50(b)

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
Jin-Seung Choi et al.	:	Confirmation No.: 2595
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2628
Filed: March 27, 2008	:	Examiner: WOO, KUO-KONG

For: Location-Based Service Method and System Using Location Data Included in Image Data

Commissioner for Patents
U.S. Patents and Trademarks Office

Attn: PATENT TRIAL AND APPEAL BOARD

AMENDMENT UNDER 37 CFR 41.50(b)(1)

MAIL STOP AMENDMENT
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Dear Sir/Madam:

The following amendments and remarks are submitted in response to the Decision on Appeal dated *March 22, 2016*, for reopening prosecution before the examiner under 37 CFR 41.50(b)(1).

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Cancelled)

2. (Currently Amended) The location-based service method according to claim [[1]]3, further comprising:

(c1) a step of compressing and storing the second image data, after the step (c).

3. (Currently Amended) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location;

(b) a step of receiving location data of the predetermined location;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data ~~The location based service method according to claim 1~~,

wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. (Currently Amended) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

(a) a step of generating first image data with the terminal at a predetermined location;

(b) a step of receiving location data of the predetermined location;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data; and

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data,

wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service;

(d1-1) a step of selecting a type of the map;

(d2) a step of transmitting a service request signal and the location data to a map providing system; and

(d3) a step wherein the map providing system provides a map corresponding to the location data~~The location-based service method according to claim 3, further comprising the step of selecting a type of the map, after the step (d1)~~.

6. (Currently Amended) The location-based service method according to claim [[1]]3, wherein the service using the location data in the step (d) is a guiding service, the method further comprising:

(d1-1) a step of selecting the guiding service;

(d2-1) a step of transmitting a service request signal and the location data to a navigation system; and

(d3-1) a step wherein the navigation system provides a navigation data corresponding to the location data.

7. (Currently Amended) The location-based service method according to claim 6, wherein current location data of the terminal is transmitted to the navigation system in the step (d2-1).

8. (Previously Presented) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time.

9. (Previously Presented) The location-based service method according to claim 1, wherein the location data are provided by a location data providing system.

10. (Previously Presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. (Previously Presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. (Currently Amended) The location-based service method according to claim [[1]]3, wherein the location data includes information on latitude and longitude of the terminal or base station.

13. (Currently Amended) The location-based service method according to claim [[1]]3, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (Previously Presented) The location-based service method according to claim 13, wherein the digital camera includes a module for receiving the location data.

15. (Cancelled)

16. (Currently Amended) The terminal according to claim [[15]]17, wherein the camera section is configured to receive the location data.

17. (Currently Amended) A terminal, the terminal configured to receive location data, comprising:

a camera section for generating a first image data at a predetermined location;

a location data processing section for prompting a user to choose whether or not to insert the location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the location data into the first image data to generate a second image data; and

an image data storing section for receiving and storing the second image data;

a transmitting section for transmitting the second image data, the second image data including the first image data and the location data, to another terminal, so that a location-based service is provided to the another terminal using the location data of the second image data~~The terminal according to claim 15, further comprising~~; and

a compression controller for compressing the second image data and transmitting the second image data to the image data storing section.

18. (Currently Amended) The terminal according to claim [[15]]17, wherein the location data is provided by a location data providing system using a base station or a satellite.

19. (Previously Presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

20. (Previously Presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. (Previously Presented) The terminal according to claim 20, further comprising:

a service system for providing a service according to a user's selection based on the location data.

23. (Previously Presented) The terminal according to claim 22, wherein the service system is a map providing system or a navigation system.

REMARKS

Applicant appreciates the Patent Trial and Appeal Board's thorough review of the present application and respectfully requests reconsideration. Applicant now requests reopening of prosecution before the examiner under 37 CFR 41.50(b)(1).

Claims 1 and 15 have been cancelled without prejudice or disclaimer. Claims 2, 3, 5-7, 12, 13 and 16-18 have been amended. No new matter has been introduced through the foregoing amendments. Claims 2-14 and 16-23 are pending in this application.

35 U.S.C. § 103(a) Rejections

1. Claims 1, 3, 5-9 and 11-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Clapper (US 6,023,241) in view of Takahashi et al. (US 2004/0229656)

2. Claims 2 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Haruki (US 2002/0135680)

3. Claims 4, 10 and 18-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Clapper and Takahashi as applied to claim 1 above, and further in view of Basir (US 2006/007755).

In the Decision on Appeal, the Patent Trial and Appeal Board ("PTAB") reversed the Examiner's above rejections of claims 1-23. The PTAB entered a new ground of rejection for claims 1 and 15 only. However, the cancellation of claims 1 and 15 renders the PTAB's new ground of rejection moot.

Applicant now respectfully submits, before the examiner, that features of "(d1) a step of selecting the map providing service; (d2) a step of transmitting a service request signal and the location data to a map providing system; and (d3) a step wherein the map providing system provides a map corresponding to the location data," which are recited in claim 3, a feature of "selecting a type of the map," which is recited in claim 5, and a feature of "a compression controller for compressing the second image data and transmitting the second image data to the

image data storing section," which is recited in claim 17, are not disclosed in or taught by the prior art in the record, for at least the reasons detailed in the Appeal Brief, pages 11-15 and/or the Reply Brief, pages 7-11, which are incorporated by reference herein.

As a result, Applicant respectfully submits that the rejections of independent claims 3, 5 and 17, and dependent claims 2, 4, 6-14, 16 and 18-23 are believed overcome.

Withdrawal of the rejections under35 U.S.C. §103(a) is respectfully requested.

Conclusion

It is respectfully submitted that the present application is in condition for allowance. A swift Notice to that effect is earnestly solicited.

Otherwise, the claims are believed to be in condition for appeal.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: May 20, 2016

Electronic Acknowledgement Receipt

EFS ID:	25842513
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Jeneen Adamo
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	20-MAY-2016
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Time Stamp:	16:05:51
Application Type:	U.S. National Stage under 35 USC 371

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		F-Amendment.pdf	50512 c490e2be71a2a27d66eacb8c0634f27533ab28cd	yes	8

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Argument after Patent Board Decision	1	1
	Claims	2	6
	Applicant Arguments/Remarks Made in an Amendment	7	8

Warnings:	
Information:	
Total Files Size (in bytes):	50512

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/911,879	Filing Date 03/27/2008	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	05/20/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 21	Minus	** 23	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/BRIDGET MONROE/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 06/13/2016

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EXAMINER	
WOO, KUO-KONG	

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
06/13/2016	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ipfirm.com
pair_lhhb@firsttofile.com
EAnastasio@IPFirm.com

Office Action Summary	Application No. 11/911,879	Applicant(s) CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2628	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/20/2016*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *2-14 and 16-23* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *2-14 and 16-23* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA

1. The present application is being examined under the pre-AIA first to invent provisions.

Response to Remarks

2. Applicant's remarks with respect to claim 17 has been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 9 is rejected under 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Amended claim 9 stated …according to claim "1" which has been cancelled, Claim 9 depends on which claim is unclear. The examiner will examine the claim 9 according to claim 3.

Claim Rejections - 35 USC § 103

5. Claims 3-9 and 11-13 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Clapper (US PAT 6,023,241).

Regarding claim 3, Clapper discloses: A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, (**Col. 5:40-46, Fig, 7 ,a digital image 108 on a frame that may be displayed on the display 20. The display 20 may also include textual GPS data, as indicated at 110**) comprising:

(a) a step of generating first image data with the terminal at a predetermined location (**Col. 4, 11. 53-54, 57-61, 64-66, the user either provides an image or is prompted for an image input at blocks 82, 88, and 90 (Fig. 6) and, in response, generates first image data**). As for the "at a predetermined location" limitation, the image is taken at a location and, thus, generated "at a predetermined location," as broadly as recited;

(b) a step of receiving location data of the predetermined location: (**Col. 4:53-57 and Fig. 6, receives the recited "location data" as global position system (GPS) coordinates in block 86)**;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data: **(Col. 4:57-67, Fig. 6, a prompt at block 88 leads to block 92 where GPS data may be superimposed over the first image data, generating a second image. image 108, including GPS data 110, becomes the recited second image because it is generated from the first image and the GPS location information. also Fig. 7).** However, when the user is prompted for an image

at block 88, there is no further prompt to choose whether or not to insert the received location data as recited.

Yet, we conclude that it would have been obvious to prompt Clapper's user to superimpose the GPS data. Specifically, Clapper provides two embodiments for inserting GPS data in an image. (**Col. 4:64 to Col. 5: 7, GPS data is inserted in the first image to generate a second image as discussed previously. Also see Col. 4, 57-67**).

Clapper provides GPS data in a second frame separate from the first image. (**Col. 5:2-7. This illustrates that Clapper teaches and has the ability to store the first image data separate from a second image data containing GPS data).**

Furthermore, Clapper demonstrates that having prompts for different functionalities to solicit user input is known in the art. See, (Col**. 4:57-59, 64-65; Fig. 6 (prompting a user for an image to be associated with GPS data**); (**Col.5:8-9; Fig. 6 (prompting a user for audio at block 94)**; (**Col. 4:4-9 and 25—27, Figs. 4—5 (prompting a user for an identifier)**. Given that Clapper teaches it was known to prompt a user for different functionalities, and given that Clapper has the ability to store a first image separate from a second image, it would have been obvious to one skilled in the art to include a prompt to ask the user whether to insert GPS data into the first image or to store it separately. For example, it would have been obvious to include such a prompt between Clapper's blocks 90 and 92 in Figure 6. This combination of Clapper's teachings would not change how a prompt works, and, therefore, would have

constituted nothing more than a combination of prior art elements yielding a predictable result.

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data (**the second image data is the image shown in Clapper's image 108 having GPS data 110 (see Clapper, Fig. 7)**,

Regarding the "transmitting" step, (**Col.1: 58-60, Col.3, 61-67, Col. 4:12-19 and 39-41, and Col. 5: 8-17, terminal 10 stores the second image as multimedia data**) wherein multimedia data is used in a presentation downloaded from excursion server 42 where a user can take an excursion or guided multimedia tour without a personal guide. (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36**).

Regarding the "providing" step, (**Col. 6:31-46 provides a location-based service from the excursion server 42 in the form of a preprogrammed excursion**). These preprogramed excursions are downloaded from server 42 to the terminal 10. computer 36 connects the excursion server 42 to terminal 10. See Fig. 2. Because the downloaded excursions must pass through computer 36, Clapper's excursion server 42

provides this location-based service to another terminal (e.g., computer 36), as recited. Moreover, Clapper provides these excursions using the current GPS coordinates matched with the location data of the second image data. (**Col. 6:42-46. In this way, Clapper provides "a location-based service to the terminal using the location data of the second image data,")** as recited.

Wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service (**Col. 5:34-36, Fig, 6, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark**) wherein step 92 superimpose GPS data on the image as location information;

(d2) a step of transmitting a service request signal and the location data to a map providing system (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36**).; and

(d3) a step wherein the map providing system provides a map corresponding to the location data (**Col. 5:34-36, Fig, 6, the map may be a digital map 106 with a point corresponding to the location of the currently recorded landmark)** wherein step 92 superimpose GPS data on the image as location data.

Regarding claim 4, Clapper discloses: wherein the map includes at least one of geographical information (**Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116).**

Regarding claim 5, Clapper discloses: A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, (**Col. 5:40-46, Fig, 7 ,a digital image 108 on a frame that may be displayed on the display 20. The display 20 may also include textual GPS data, as indicated at 110**) comprising:

(a) a step of generating first image data with the terminal at a predetermined location (**Col. 4, 11. 53-54, 57-61, 64-66, the user either provides an image or is prompted for an image input at blocks 82, 88, and 90 (Fig. 6) and, in response, generates first image data**). As for the "at a predetermined location" limitation, the image is taken at a location and, thus, generated "at a predetermined location," as broadly as recited;

(b) a step of receiving location data of the predetermined location: (**Col. 4:53-57 and Fig. 6, receives the recited "location data" as global position system (GPS) coordinates in block 86)**;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user

chooses to do so, inserting the received location data into the first image data to generate a second image data: **(Col. 4:57-67, Fig. 6, a prompt at block 88 leads to block 92 where GPS data may be superimposed over the first image data, generating a second image. image 108, including GPS data 110, becomes the recited second image because it is generated from the first image and the GPS location information. also Fig. 7).** However, when the user is prompted for an image at block 88, there is no further prompt to choose whether or not to insert the received location data as recited.

Yet, we conclude that it would have been obvious to prompt Clapper's user to superimpose the GPS data. Specifically, Clapper provides two embodiments for inserting GPS data in an image. (**Col. 4:64 to Col. 5: 7, GPS data is inserted in the first image to generate a second image as discussed previously. Also see Col. 4, 57-67**).

Clapper provides GPS data in a second frame separate from the first image. (**Col. 5:2-7. This illustrates that Clapper teaches and has the ability to store the first image data separate from a second image data containing GPS data).**

Furthermore, Clapper demonstrates that having prompts for different functionalities to solicit user input is known in the art. See, (Col**. 4:57-59, 64-65; Fig. 6 (prompting a user for an image to be associated with GPS data**); (**Col.5:8-9; Fig. 6 (prompting a user for audio at block 94)**; (**Col. 4:4-9 and 25—27, Figs. 4—5 (prompting a user for an identifier)**. Given that Clapper teaches it was known to prompt a user for different functionalities, and given that Clapper has the ability to store

a first image separate from a second image, it would have been obvious to one skilled in the art to include a prompt to ask the user whether to insert GPS data into the first image or to store it separately. For example, it would have been obvious to include such a prompt between Clapper's blocks 90 and 92 in Figure 6. This combination of Clapper's teachings would not change how a prompt works, and, therefore, would have constituted nothing more than a combination of prior art elements yielding a predictable result.

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data

(The second image data is the image shown in Clapper's image 108 having GPS data 110, see Clapper, Fig. 7),

Regarding the "transmitting" step, (**Col.1: 58-60, Col.3, 61-67, Col. 4:12-19 and 39-41, and Col. 5: 8-17, terminal 10 stores the second image as multimedia data**) wherein multimedia data is used in a presentation downloaded from excursion server 42 where a user can take an excursion or guided multimedia tour without a personal guide. (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a**

monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36).

Regarding the "providing" step, (**Col. 6:31-46 provides a location-based service from the excursion server 42 in the form of a preprogrammed excursion**). These preprogramed excursions are downloaded from server 42 to the terminal 10. Computer 36 connects the excursion server 42 to terminal 10. See Fig. 2. Because the downloaded excursions must pass through computer 36, Clapper's excursion server 42 provides this location-based service to another terminal (e.g., computer 36), as recited. Moreover, Clapper provides these excursions using the current GPS coordinates matched with the location data of the second image data. (**Col. 6:42-46. In this way, Clapper provides "a location-based service to the terminal using the location data of the second image data,")** as recited.

Wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service (**Col. 5:34-36, Fig, 6, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark**) wherein step 92 superimpose GPS data on the image as location information;

(d1-1) a step of selecting a type of the map **(Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116)** wherein geographical information as landmarks will be included in this type map;

(d2) a step of transmitting a service request signal and the location data to a map providing system (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36**); and

(d3) a step wherein the map providing system provides a map corresponding to the location data (**Col. 5:34-36, Fig, 6, the map may be a digital map 106 with a point corresponding to the location of the currently recorded landmark)** wherein step 92 superimpose GPS data on the image as location data.

Regarding claim 6, Clapper discloses :(d1-1) a step of selecting the guiding service (**Col. 6: 31-34, the recorder 10 (the terminal) may be coupled to a computer 36 to access information from the Internet 40. Preprogrammed excursions (guiding service) may then be downloaded from the excursion server 42 and stored in the storage device 32**);

(d2-1) a step of transmitting a service request signal and location data to a navigation system (**Col. 6:38, the information may also be accessed over a direct modem connection or through a network connection**) wherein transmitting a service request, (**Col.5: 63-67, mapping software for use in connection with GPS receivers**

and automatically generates a map of the locale around input GPS coordinates) wherein mapping software will provide information to GPS system; and

"(d3-1) a step wherein the navigation system provides a navigation data corresponding to the location data (**Col. 6:9-11, a location may be selected, for example, by entering the mapping mode, and selecting a point such as the point 114D as indicated at 118. That image or that location is automatically displayed in the display mode)** wherein GPS provides those location information is a navigation data**.**

Regarding claim 7, Clapper discloses: wherein current location data of the terminal is transmitted to the navigation system in the step (d2-1) **(Col. 5:33-36, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark)** wherein digital map is part of navigation system.

Regarding claim 8, Clapper discloses: wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time (**Col. 7:1-4, linked data files may be provided to give the user additional information about a particular landmark. This information may include the time that the user arrived at the landmark in the past**) wherein turnaround time information is provided.

Regarding claim 9, Clapper discloses: wherein the location data are provided by a location data providing system (**Col. 4:53-57, the current GPS data is obtained, as indicated in block 86. Conventionally, GPS data may include information about the current time, GPS coordinates for the location and the like).**

Regarding claim 11, Clapper discloses: wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS) (**Col.4:55-56, GPS data may include information about the current time, GPS coordinates for the location and the like).**

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Regarding claim 12, Clapper discloses: wherein the location data includes information on latitude and longitude of the terminal or base station **(Col. 5:33-35, a map may be displayed that includes the GPS data 110, a plurality of physical landmarks (geographical information) such as streets 116)** wherein GPS coordinates including the latitude and the longitude of the location data.

Regarding claim 13, Clapper discloses: wherein the terminal equipped with the camera includes a camera phone or a digital camera (**Col. 2:12, a camera lens 18 is provided in one end of housing 12).**

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over Clapper as applied to claim 1 above in view of Basir (US PGPUB 2006/007755 A1).

Regarding claim 10, Clapper discloses **(Col. 5: 62-66, the mapping software automatically generates a map of the locale around input GPS coordinates)**.

However, Clapper does not explicitly disclose CPS system.

In an analogous art, Basir discloses: wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (**¶27, the sources 19 of position information can include: AFLT (Advanced Forward Link Trilateration), or other methods for determining mobile device location using cell towers on a mobile phone network**) wherein AFLT is CPS utilizing trilateration to determine the location of mobile device.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by CPS location information by latitude, longitude, and mobile device location using cell towers on a mobile phone network as taught by Basir for the purpose of clear define the subject location.

7. Claims 2 , 14, 16 and 17-18, 20-23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Clapper (US PAT 6,023,241) as applied to claim 3 in view of Haruki (US PGPUB 2002/0135680 A1).

Regarding claim 2, Clapper discloses:(cl) a step of compressing storing the second image data , after step (c) (**Col.3:60-64, the recorder 10 may store multimedia, such as video, audio and data files, in association with one another so that a multimedia presentation may be provided, a digital image of a particular landmark may be stored in association with an audio description of that landmark**

and GPS coordinates which locate the landmark) and (¶4:12-13, the media file may then be stored in association with the identifier as indicated in block 66(store second image data)) the second image data, after the step (c).

However, Clapper does not explicitly disclose compressing the second image data.

In an analogous art, Haruki discloses **(¶32, system controller 30 creates an image file including the compressed image signal generated by the signal processing circuit 14, the location information and the time information detected by himself, and his own camera ID within a memory card 18)**.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by compressing image data signal generated by the signal processing circuit 14 as taught by Haruki for the purpose of easy to store and compress image data for the subject information.

Regarding claims 14 and 16, Clapper does not explicitly discloses: the digital camera includes a module for receiving the location data.

In an analogous art, Haruki discloses: wherein the digital camera includes a module for receiving the location data (**¶32, Fig. 1, the digital camera 10 at an arbitrary location, and detects a present location and a present time)** wherein communication module is part of camera is able to receive the location information and incorporate with image picture**.**

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by superimpose the location information to image picture as taught by Haruki for the purpose of easy to identify the picture with location information.

Regarding claim 17, Clapper discloses: A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, (**Col. 5:40-46, Fig, 7 ,a digital image 108 on a frame that may be displayed on the display 20. The display 20 may also include textual GPS data, as indicated at 110**) comprising:

(a) a step of generating first image data with the terminal at a predetermined location (**Col. 4, 11. 53-54, 57-61, 64-66, the user either provides an image or is prompted for an image input at blocks 82, 88, and 90 (Fig. 6) and, in response, generates first image data**). As for the "at a predetermined location" limitation, the image is taken at a location and, thus, generated "at a predetermined location," as broadly as recited;

(b) a step of receiving location data of the predetermined location: (**Col. 4:53-57 and Fig. 6, receives the recited "location data" as global position system (GPS) coordinates in block 86)**;

(c) a step of prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, if the user chooses to do so, inserting the received location data into the first image data to generate a second image data: **(Col. 4:57-67, Fig. 6, a prompt at block 88 leads to**

block 92 where GPS data may be superimposed over the first image data, generating a second image. image 108, including GPS data 110, becomes the recited second image because it is generated from the first image and the GPS location information. also Fig. 7). However, when the user is prompted for an image at block 88, there is no further prompt to choose whether or not to insert the received location data as recited.

Yet, we conclude that it would have been obvious to prompt Clapper's user to superimpose the GPS data. Specifically, Clapper provides two embodiments for inserting GPS data in an image. (**Col. 4:64 to Col. 5: 7, GPS data is inserted in the first image to generate a second image as discussed previously. Also see Col. 4, 57-67**).

Clapper provides GPS data in a second frame separate from the first image. (**Col. 5:2-7. This illustrates that Clapper teaches and has the ability to store the first image data separate from a second image data containing GPS data).**

Furthermore, Clapper demonstrates that having prompts for different functionalities to solicit user input is known in the art. See, (Col**. 4:57-59, 64-65; Fig. 6 (prompting a user for an image to be associated with GPS data**); (**Col.5:8-9; Fig. 6 (prompting a user for audio at block 94)**; (**Col. 4:4-9 and 25—27, Figs. 4—5 (prompting a user for an identifier)**. Given that Clapper teaches it was known to prompt a user for different functionalities, and given that Clapper has the ability to store a first image separate from a second image, it would have been obvious to one skilled in the art to include a prompt to ask the user whether to insert GPS data into the first

image or to store it separately. For example, it would have been obvious to include such a prompt between Clapper's blocks 90 and 92 in Figure 6. This combination of Clapper's teachings would not change how a prompt works, and, therefore, would have constituted nothing more than a combination of prior art elements yielding a predictable result.

(d) a step of transmitting the second image data, the second image data including the first image data and the location data, to another terminal and providing a location-based service to the another terminal using the location data of the second image data **(The second image data is the image shown in Clapper's image 108 having GPS data 110 see Clapper, Fig. 7)**,

Regarding the "transmitting" step, (**Col.1: 58-60, Col.3, 61-67, Col. 4:12-19 and 39-41, and Col. 5: 8-17, terminal 10 stores the second image as multimedia data**) wherein multimedia data is used in a presentation downloaded from excursion server 42 where a user can take an excursion or guided multimedia tour without a personal guide. (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36**).

Regarding the "providing" step, (**Col. 6:31-46 provides a location-based service from the excursion server 42 in the form of a preprogrammed excursion**).

These preprogramed excursions are downloaded from server 42 to the terminal 10. Computer 36 connects the excursion server 42 to terminal 10. See Fig. 2. Because the downloaded excursions must pass through computer 36, Clapper's excursion server 42 provides this location-based service to another terminal (e.g., computer 36), as recited. Moreover, Clapper provides these excursions using the current GPS coordinates matched with the location data of the second image data. (**Col. 6:42-46. In this way, Clapper provides "a location-based service to the terminal using the location data of the second image data,")** as recited.

Wherein the location-based service using the location data in the step (d) is a map providing service, the method further comprising:

(d1) a step of selecting the map providing service (**Col. 5:34-36, Fig, 6, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark**) wherein step 92 superimpose GPS data on the image as location information;

(d2) a step of transmitting a service request signal and the location data to a map providing system (**Col. 6:31-46. Figure 2 shows bi-directional communication between server 42 and terminal 10 through computer 36) (Col. 7:8-15 (disclosing a user uploading data from terminal 10). So, as recited in claim 1, terminal 10 transmits the second image data including the first image data (id., Fig. 7 (showing an image of a monument)) and the location data (Col. 4: 57-67 (GPS data)) to another terminal (Fig. 2, computer 36**); and

(d3) a step wherein the map providing system provides a map corresponding to the location data (**Col. 5:34-36, Fig, 6, the map may be a digital map 106 with a point corresponding to the location of the currently recorded landmark)** wherein step 92 superimpose GPS data on the image as location data.

However, Clapper does not explicitly disclose a compression controller for compressing the second image data.

A compression controller for compressing the second image data and transmitting the second image data to the image data storing section.

In an analogous art, Haruki discloses: a compression controller for compressing the second image data and transmitting the second image data to the image data storing section **(¶32, system controller 30 creates an image file including the compressed image signal generated by the signal processing circuit 14, the location information and the time information detected by himself, and his own camera ID within a memory card 18)**.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by compressing image data signal generated by the signal processing circuit 14 as taught by Haruki for the purpose of easy to store and compress image data for the subject information.

Regarding claim 18, Clapper discloses: wherein the location data is provided by a location data providing system using a base station or a satellite **(Col. 5: 62-66, the**

mapping software automatically generates a map of the locale around input GPS coordinates) wherein GPS location information is using a satellite.

Regarding claim 20, Clapper discloses: wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS) (**Col. 2:4-6, The GPS receiver 14 may provide current time and position information in terms of global positioning system coordinates)** wherein the location data is provided through GPS.

Regarding claim 21, Clapper discloses: a GPS antenna for receiving the location data from the location data providing system (**Col. 214-15, The GPS antenna may be integrated into the housing 12).**

Regarding claim 22, Clapper discloses: a service system for providing a service according to a user's selection based on the location data **(Col. 2:14-15, travel information may be displayed)** wherein the information is based on the user selection on the map.

Regarding claim 23, Clapper discloses: wherein the service system is a map providing system or a navigation system **(Col. 4:48-52, the service provides a numerical identification for each of the various points that may be entered. These**

points may be displayed on a digital map display that may correspond to different physical locations).

8. Claim 19 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Clapper and Haruki and further in view of Basir (US PGPUB 2006/007755 A1).

Regarding claim 19, Clapper does not disclose: the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

However, In an analogous art, Basir discloses: wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (**¶27, the sources 19 of position information can include: AFLT (Advanced Forward Link Trilateration), or other methods for determining mobile device location using cell towers on a mobile phone network**) wherein AFLT is CPS utilizing trilateration to determine the location of mobile device.

It would have been obvious to one of ordinary skill of the art at time of invention to modify Clapper by CPS location information by latitude, longitude, and mobile device location using cell towers on a mobile phone network as taught by Basir for the purpose of clear define the subject location.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nitin Patel can be reached on 571-272-7677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2628

/ANDREW SASINOWSKI/

Primary Examiner, Art Unit 2622

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	**Art Unit**
	KUO WOO	2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/05/2010	03/24/2011	08/29/2012	02/07/2013	06/02/2016				
	1	✓	✓	✓	✓	-				
	2	✓	✓	✓	✓	✓				
	3	✓	✓	✓	✓	✓				
	4	✓	✓	✓	✓	✓				
	5	✓	✓	✓	✓	✓				
	6	✓	✓	✓	✓	✓				
	7	✓	✓	✓	✓	✓				
	8	✓	✓	✓	✓	✓				
	9	✓	✓	✓	✓	✓				
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	12	✓	✓	✓	✓	✓				
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	20	✓	✓	✓	✓	✓				
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	22	✓	✓	✓	✓	✓				
	23	✓	✓	✓	✓	✓				

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	124	"6437797"	US-PGPUB; USPAT	ADJ	ON	2016/06/07 12:04
L3	98	l2 and image and map and location data and navigation	US-PGPUB; USPAT	ADJ	ON	2016/06/07 12:03
L2	7000	G06F17/30265.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/06/07 12:03
S138	1	"11911879" and first image data and second image data and service and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/06/02 23:23
S137	1	"20040229656"	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S136	1	"6023241".pn. and excursion and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S135	1	"6023241".pn. and excursion and location	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S134	1	"6023241".pn. and excursion	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S133	8	S130 and (latitude and longitude) with location and positioning system	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S132	9	S130 and (latitude and longitude) with location	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S131	15	S130 and latitude and longitude	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S130	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23

		6459388-$).did.				
S129	1	S125 and map$4 with location and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S128	1	S125 and map$4 and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S127	1572309	S125 and map$4 and computer or service	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
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S124	2	"10/101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S123	1	"10101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S122	2	"10101594"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S121	1	"10101594" and compress$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S120	3	S118 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S119	3	S118 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S118	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
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S115	3	S110 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S114	15	S110 and location and (compress$3 or stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S113	5	S110 and location and compress$3 and stor$3 and image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S112	12	S110 and location and compress$3	US-PGPUB;	ADJ	ON	2016/06/02

		and stor$3 and image	USPAT			23:23
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S109	57	("20010014222" | "20010015759" | "20010016849" | "20010051850" | "20010051876" | "20010056326" | "20020007311" | "20020032787" | "20020071677" | "20020093435" | "20020128773" | "20020143762" | "20020198736" | "20030004693" | "20030009281" | "20030021591" | "20030069693" | "20030069893" | "20030078724" | "20030164796" | "20030164822" | "20030184654" | "20030202104" | "20040049345" | "20040054463" | "20040075697" | "4949268" | "5819092" | "5890171" | "5893101" | "5913078" | "6023241" | "6047234" | "6133947" | "6182010" | "6282362" | "6323885" | "6459388" | "6466865" | "6484086" | "6504571" | "6604126" | "6629100" | "6691032" | "6819356" | "6883146" | "6895126" | "6914626" | "6943825" | "6950198" | "6965828" | "6977679" | "7100190" | "7135994" | "7171113" | "7197158").PN. OR ("8116598").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2016/06/02 23:23
S108	255	(smart phone or PDA) and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S107	0	(smart phone or PDA) and guiding service and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S106	4312	(image or photo)with location and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S105	34	("20040192309" | "20040203998" | "20060111084" | "20070149133" | "20070249316" | "7072657").PN. OR ("7437158").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2016/06/02 23:23
S104	1	"7437158".pn.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23

S103	39	S100 and (image or photo) and location and map and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S102	88	S100 and (image or photo) and location and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S101	104	S100 and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S100	7008	smart phone with GPS	US-PGPUB; USPAT	ADJ	OFF	2016/06/02 23:23
S99	4	("20020049064" | "20020101619" | "20020101619" | "6199014" | "6437797" | "6437797").PN.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S98	1	"11911879" and transmit and first image and second image and user	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S97	1	"11911879" and transmit and first image and second image	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S96	1	S92 and base station and position system	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S95	5	S92 and base station and position	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S94	5	S92 and base station	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S93	3	S92 and route and traffic	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S92	17	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S91	159	455/456.2 and image and map and guid$3 and location and GPS and camera	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S90	292	455/456.2 and image and map and guid$3 and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S89	273	455/456.2 and image and map and guide and location	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S88	6387	455/456.2	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S87	331	("4937751" | "4951211" | "4992947" | "4994971" | "5043902" | "5103400" | "5214793" | "5381338" | "5396431" | "5442557" | "5537323" | "5559949" | "5587911" | "5596494" | "5610822" | "5614898" | "5646629" | "5648768" | "5659469" | "5689252").PN. OR ("6199014").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/02 23:23
S86	2	S83 and image and map and location and GPS not S85	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S85	4	S83 and image and map and location data and latitude	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S84	4	S83 and image and map and location data and navigation	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23

S83	198	(US-5365516-$ or US-5526357-$ or US-5303393-$ or US-5388074-$ or US-6047192-$ or US-5382508-$ or US-5689245-$ or US-5742509-$ or US-4605921-$ or US-4949287-$ or US-4994971-$ or US-5493709-$ or US-5524234-$ or US-5611064-$ or US-5613109-$ or US-5642365-$ or US-5790183-$ or US-5860111-$ or US-5873089-$ or US-5926208-$ or US-5956369-$ or US-5999200-$ or US-6098048-$ or US-6230312-$ or US-4270206-$ or US-4387271-$).did. or (US-4586094-$ or US-4796185-$ or US-4965856-$ or US-4970718-$ or US-5027395-$ or US-5206837-$ or US-5231381-$ or US-5241635-$ or US-5283884-$ or US-5375251-$ or US-5402151-$ or US-5450370-$ or US-5491669-$ or US-5519829-$ or US-5625721-$ or US-5648938-$ or US-5703972-$ or US-5872987-$ or US-5886705-$ or US-5913618-$ or US-5922073-$ or US-5941930-$ or US-5973731-$ or US-6021250-$ or US-6085099-$ or US-6088706-$ or US-6119179-$).did. or (US-6134583-$ or US-6219775-$ or US-4252897-$ or US-4266271-$ or US-4288659-$ or US-4298959-$ or US-4350238-$ or US-4359622-$ or US-4433377-$ or US-4499597-$ or US-4530045-$ or US-4569048-$ or US-4615040-$ or US-4755936-$ or US-4791547-$ or US-4802199-$ or US-4817095-$ or US-4829475-$ or US-4933833-$ or US-4949240-$ or US-4973956-$ or US-4975870-$ or US-4979594-$ or US-4999783-$ or US-5016221-$ or US-5179633-$ or US-5293565-$).did. or (US-5301141-$ or US-5305253-$ or US-5353399-$ or US-5388257-$ or US-5408867-$ or US-5410695-$ or US-5428685-$ or US-5459516-$ or US-5465291-$ or US-5493632-$ or US-5497356-$ or US-5537535-$ or US-5541396-$ or US-5548728-$ or US-5559512-$ or US-5576973-$ or US-5592450-$ or US-5596565-$ or US-5602986-$ or US-5606707-$ or US-5617538-$ or US-5619371-$ or US-5623285-$ or US-5634063-$ or US-5644718-$ or US-5657431-$ or US-5671451-$).did. or (US-5684476-$ or US-5699105-$ or US-5710706-$ or US-5712981-$ or US-5726893-$ or US-5734787-$ or US-5748322-$ or US-5748555-$ or US-5768235-$ or US-5818356-$ or US-5825759-$ or US-5850416-$ or US-5860119-$ or US-5870719-$ or US-5889917-$ or US-5930801-$ or US-5936180-$ or US-5955973-$ or US-6026151-$ or US-6041386-$ or US-6043658-$ or	USPAT	ADJ	ON	2016/06/02 23:23

		US-6049711-$ or US-6070123-$ or US-6078532-$ or US-6081855-$ or US-6091555-$ or US-RE36791-$).did. or (US-6104344-$ or US-6115206-$ or US-6126070-$ or US-6154139-$ or US-6154658-$ or US-6163701-$ or US-6188776-$ or US-6199014-$ or US-6201804-$ or US-6226710-$ or US-6229998-$ or US-6239628-$ or US-6240167-$ or US-6240369-$ or US-4258236-$ or US-4262332-$ or US-4273955-$ or US-4276925-$ or US-4284883-$ or US-4284160-$ or US-4293857-$ or US-4306898-$ or US-RE31069-$ or US-4315101-$ or US-4317010-$ or US-4317168-$ or US-4321683-$).did. or (US-4328544-$ or US-4345315-$ or US-4360265-$ or US-4370730-$ or US-4373198-$ or US-4384195-$ or US-4390974-$ or US-4393448-$ or US-4397569-$ or US-4403119-$ or US-4408271-$ or US-4414645-$ or US-4417317-$ or US-4419384-$ or US-4437672-$ or US-4438507-$ or US-4454383-$ or US-4458332-$ or US-4468750-$ or US-4479092-$ or US-4482902-$ or US-4513390-$ or US-4516206-$ or US-4527262-$ or US-4531311-$ or US-4536647-$ or US-4545576-$).did. or (US-4555699-$ or US-4563096-$ or US-4569034-$ or US-4578535-$ or US-4589100-$ or US-4589081-$ or US-4592036-$ or US-4604750-$ or US-4613913-$ or US-4620446-$).did.				
S82	1	"20020049064"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S81	2	"20020135680"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S80	294	("5124915" | "5414462" | "5517419" | "5596494" | "5878356" | "5894323" | "5904724").PN. OR ("6023241").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/02 23:23
S79	35	("20020036565" | "20020152390" | "20070047770" | "4768099" | "4992887" | "5307297" | "5334823" | "5412727" | "5467403" | "5579393" | "5724155" | "5737491" | "5865745" | "5920317" | "5960155" | "6023241" | "6038012" | "6038333" | "6040783" | "6128398" | "6381348" | "6535243" | "6542627" | "6633223").PN. OR ("7664296").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/02 23:23
S78	130	("4737927" | "5283562" | "5500743" | "5550584" | "5638184" | "5682441" | "5748109" | "5784059" | "5835266").PN. OR ("6437797").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/02 23:23
S77	2	"20020101619"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S76	1	"7664296".pn.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23

S75	1	"6437797".pn.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S74	124	"6437797"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S73	1	"11911879"	US-PGPUB; USPAT	ADJ	ON	2016/06/02 23:23
S72	25	S71 and (camera or image)with (GPS or cps or location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/06/02 21:16
S71	31	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$ or US-20040229656-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/06/02 21:15
S70	1	"11911879" and first image data and second image data and service and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/05/31 22:35

EAST Search History (Interference)

< This search history is empty>

6/7/2016 12:04:44 PM
C:\Users\kwoo\Documents\EAST\Workspaces\11911879.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2698

CPC- SEARCHED		
Symbol	Date	Examiner
G06F17/30265	6/7/2016	kw

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010,3/23/2011	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW
342	357.2	8/29/2012	kw
340	539.13	8/29/2012	kw
348	207.2	8/29/2012	kw

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010, 8/29/2012	KW
PCT search	10/4/2010,3/23/2011	KW
Consulted with PE N Mitchell for final rejection	12/16/2012	KW
Consulted with PE Nathan Mitchell for non final office action	6/1/2016	kw

INTERFERENCE SEARCH

/KUO WOO/ Examiner.Art Unit 2628	

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/KUO WOO/ Examiner.Art Unit 2628	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 08/31/2016

HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314

EXAMINER	
WOO, KUO-KONG	

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
08/31/2016	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ipfirm.com
pair_lhhb@firsttofile.com
EAnastasio@IPFirm.com

Applicant-Initiated Interview Summary	**Application No.** 11/911,879	**Applicant(s)** CHOI ET AL.	
	Examiner KUO WOO	**Art Unit** 2628	

All participants (applicant, applicant's representative, PTO personnel):

(1) *KUO WOO*. (3)_____.

(2) *Sang Yoon Kang (Reg.# L0975)*. (4)_____.

Date of Interview: *24 August 2016*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *3*.

Identification of prior art discussed: *Yes Clapper and Haruki*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant argues that prior art fails to disclose"selecting the map providing service " and "Compression controller" in Claim 3 , 5 and 7, The examiner pointed out citation in prior art Clapper and compression controller by second reference Haruki . This basic rejection was written by APPEAL BOARD and the rejections were remaining stand. .

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/ANDREW SASINOWSKI/ Primary Examiner, Art Unit 2622	/KUO WOO/ Examiner, Art Unit 2628

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Docket No.: 4900-0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
Jin-Seung Choi et al.	:	Confirmation No.: 2595
U.S. Patent Application No. 11/911,879	:	Group Art Unit: 2628
Filed: March 27, 2008	:	Examiner: WOO, KUO-KONG

For: Location-Based Service Method and System Using Location Data Included in Image Data

AMENDMENT

MAIL STOP AMENDMENT
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

Dear Sir/Madam:

The following amendments and remarks are submitted in response to the Office Action dated *June 13, 2016*.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Cancelled)

2. (Currently Amended) The location-based service method according to claim 3, the method further comprising:

~~(c1) a step of~~ compressing and storing the second image data, after the ~~step (c)~~prompting.

3. (Currently Amended) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

~~(a) a step of~~ generating first image data with the terminal at a predetermined location;

~~(b) a step of~~ receiving location data of the predetermined location;

~~(c) a step of~~ prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, [[if]]when the user chooses to do so, inserting the received location data into the first image data to generate a second image data; [[and]]

~~(d) a step of~~ transmitting the second image data, the second image data including the first image data and the location data, to another terminal;

receiving, at the another terminal, a selection input for an image corresponding to the second image data, from the user;

displaying, at the another terminal, an image corresponding to the first image data, and a menu inquiring about whether to select a location-based service;

receiving, at the another terminal, via the displayed menu, a selection input for the location-based service, from the user;

receiving, at the another terminal, location-based service data corresponding to the location data of the selected second image data; and

providing the[[a]] location-based service to the another terminal by using the received location-based service data~~location data of the second image data,~~

~~wherein the location-based service using the location data in the step (d) is a map-providing service, the method further comprising:~~

~~(d1) a step of selecting the map providing service;~~

~~(d2) a step of transmitting a service request signal and the location data to a map-providing system; and~~

~~(d3) a step wherein the map providing system provides a map corresponding to the location data~~.

4. (Original) The location-based service method according to claim 3, wherein the map includes at least one of geographical information, traffic information, administrative district information, and information including the latitude and the longitude of the location data.

5. (Currently Amended) A location-based service method using image data provided by a terminal equipped with a camera, and using location data that includes location information of the terminal, comprising:

~~(a) a step of~~ generating first image data with the terminal at a predetermined location;

~~(b) a step of~~ receiving location data of the predetermined location;

~~(c) a step of~~ prompting a user to choose whether or not to insert the received location data into the first image data to generate a second image data and, [[if]]when the user chooses to do so, inserting the received location data into the first image data to generate a second image data; [[and]]

~~(d) a step of~~ transmitting the second image data, the second image data including the first image data and the location data, to another terminal;

receiving, at the another terminal, a selection input for an image corresponding to the second image data, from the user;

displaying, at the another terminal, an image corresponding to the first image data, and a menu inquiring about whether to select a location-based service;

receiving, at the another terminal, via the displayed menu, a selection input for the location-based service, from the user;

receiving, at the another terminal, location-based service data corresponding to the location data of the selected second image data; and

providing [[a]]the location-based service to the another terminal by using the received location-based service data~~location data of the second image data,~~

~~wherein the location-based service using the location data in the step (d) is a map-providing service, the method further comprising:~~

~~(d1) a step of selecting the map providing service;~~

~~(d1-1) a step of selecting a type of the map;~~

~~(d2) a step of transmitting a service request signal and the location data to a map-providing system; and~~

~~(d3) a step wherein the map providing system provides a map corresponding to the location data~~.

6. (Currently Amended) The location-based service method according to claim 3,

wherein the location-based service ~~using the location data in the step (d)~~ is a guiding service, ~~the method further comprising:~~

~~(d1-1) a step of selecting the guiding service;~~

wherein the receiving the selection input comprises ~~(d2-1) a step of~~ transmitting a service request signal and the location data to a navigation system[[; and]],

~~(d3-1) a step~~ wherein the navigation system provides a navigation data corresponding to the location data, as the location-based service data, and

wherein the providing the location-based service comprises providing the guiding service by means of a navigator of the another terminal, which is displayed on a display section of the another terminal.

7. (Previously Presented) The location-based service method according to claim 6, wherein the location data comprises current location data of the terminal ~~is transmitted to the navigation system in the step (d2-1)~~.

8. (Previously Presented) The location-based service method according to claim 6, wherein the navigation data comprises at least one of the information including the shortest route corresponding to the location data, traffic information and turnaround time.

9. (Currently Amended) The location-based service method according to claim [[1]]3, wherein the location data are provided by a location data providing system.

10. (Previously Presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Cell Positioning System (CPS).

11. (Previously Presented) The location-based service method according to claim 9, wherein the location data providing system is configured to provide the location data of the terminal using a Global Positioning System (GPS).

12. (Previously Presented) The location-based service method according to claim 3, wherein the location data includes information on latitude and longitude of the terminal or base station.

13. (Previously Presented) The location-based service method according to claim 3, wherein the terminal equipped with the camera includes a camera phone or a digital camera.

14. (Previously Presented) The location-based service method according to claim 13, wherein the digital camera includes a module for receiving the location data.

15. (Cancelled)

16. (Previously Presented) The terminal according to claim 17, wherein the camera section is configured to receive the location data.

17. (Currently Amended) A terminal, the terminal configured to receive location data, comprising:

a camera section for generating a first image data at a predetermined location;

a location data processing section for prompting a user to choose whether or not to insert the location data into the first image data to generate a second image data and, [[if]]when the user chooses to do so, inserting the location data into the first image data to generate a second image data; and

an image data storing section for receiving and storing the second image data;

a transmitting section for transmitting the second image data, the second image data including the first image data and the location data, to another terminal~~, so that a location-based service is provided to the another terminal using the location data of the second image data~~; and

a compression controller for compressing the second image data and transmitting the second image data to the image data storing section,

wherein the another terminal is configured to

receive a selection input for an image corresponding to the second image data, from the user,

display an image corresponding to the first image data, and a menu inquiring about whether to select a location-based service,

receive, via the displayed menu, a selection input for the location-based service, from the user,

receive location-based service data corresponding to the location data of the selected second image data, and

providing the location-based service by using the received location-based service data.

18. (Previously Presented) The terminal according to claim 17, wherein the location data is provided by a location data providing system using a base station or a satellite.

19. (Previously Presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Cell Positioning System (CPS).

20. (Previously Presented) The terminal according to claim 18, wherein the location data providing system is configured to provide the location data through a Global Positioning System (GPS).

21. (Original) The terminal according to claim 20, further comprising a GPS antenna for receiving the location data from the location data providing system.

22. (Previously Presented) The terminal according to claim 20, further comprising:

a service system for providing a service according to a user's selection based on the location data.

23. (Previously Presented) The terminal according to claim 22, wherein the service system is a map providing system or a navigation system.

24. (New) The location-based service method according to claim 5,

wherein the location-based service is a guiding service, and

wherein the receiving the selection input comprises transmitting a service request signal and the location data to a navigation system,

wherein the navigation system provides a navigation data corresponding to the location data, as the location-based service data, and

wherein the providing the location-based service comprises providing the guiding service by means of a navigator of the another terminal, which is displayed on a display section of the another terminal.

25. (New) The terminal according to claim 17,

wherein the location-based service is a guiding service, and

wherein the another terminal is further configured to, when the selection input is received, transmit a service request signal and the location data to a navigation system,

wherein the navigation system provides a navigation data corresponding to the location data, as the location-based service data, and

wherein the another terminal is further configured to provide the guiding service by means of a navigator of the another terminal, which is displayed on a display section of the another terminal.

REMARKS

Applicant appreciates the Examiner's thorough review of the present application. Further, Applicant respectfully requests reconsideration.

Claims 2, 3, 5, 6, 9 and 17 have been amended. New claims 24 and 25 have been added. No new matter has been introduced through the foregoing amendments. Claims 2-14 and 16-25 are pending in this application.

Applicant's Interview Summary

Counsel thanks Examiner *WOO, KUO-KONG* for the courtesy of the interview held on August 24, 2016.

In the interview, the Examiner asked Applicant to consider further amending claims to clarify features which never have been recited in the claims. In light of the Examiner's kind suggestion, Applicant further amended the independent to recite additional features. The Examiner's reconsideration of the amended claims is respectfully requested.

35 U.S.C. § 112, *second paragraph*, Rejection

Claim 9 was rejected under 35 U.S.C. §112(b) or 35 U.S.C. §112 (pre-AIA), *second paragraph*, as being indefinite.

In the Office Action, the Office alleged that claim 9 is unclear since claim 9 stated ...according to claim "1" which has been cancelled. In response, Applicant amended claim 9 to depend on claim 3. Applicant believes that amended claim 9 is clear and definite to one who is ordinarily skilled in the art.

Withdrawal of the rejection under 35 U.S.C. §112, *second paragraph*, is respectfully requested.

35 U.S.C. § 103(a) Rejections

1. Claims 3-9 and 11-13 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Clapper* (US PAT 6,023,241).

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over *Clapper* in view of *Basir* (US PGPUB 2006/007755).

3. Claims 2, 14, 16 and 17-18, 20-23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Clapper* in view of *Haruki* (US PGPUB 2002/0135680).

4. Claim 19 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over *Clapper* and *Haruki* and further in view of *Basir* (US PGPUB 2006/007755).

Obviousness is a question of law based on underlying factual inquiries. The factual inquiries are set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). The factual inquiries include:

(a) determining the scope and content of the prior art;

(b) ascertaining the differences between the claimed subject matter and the prior art;

(c) resolving the level of ordinary skill in the pertinent art; and

(d) considering objective evidence present in the application indicating obviousness or nonobviousness.

The Office failed to establish a *prima facie* case of obviousness, especially for the reasons below.

Independent claim 3 now recites, *inter alia*, "*receiving*, at the another terminal, ***a selection input for an image*** *corresponding to the second image data*, from the user", "*displaying*, at the another terminal, an ***image*** *corresponding to the first image data*, and a ***menu*** *inquiring about whether to select a location-based service*", "*receiving*, at the another terminal, via the displayed menu, ***a selection input for the location-based service***, from the user", "receiving, at the another terminal, location-based service data corresponding to the location data of the selected second image data" and "providing the location-based service to the another terminal by using the received location-based service data," which find support at least in paragraph [0036] of the published application.

In some embodiments according to the above features, when the ***selection input for the image*** corresponding to the second image data is received, the ***image*** corresponding to the first image data, and the ***menu*** inquiring about whether to select the location-based service are

displayed. Then, when the *selection input for the location-based service* is received *via the displayed menu*, the location-based service is provided.

In the Office Action dated June 13, 2016, the Office alleged that *Clapper* teaches features of providing the location-based service (*see* pages 2-6 of the Office Action). However, *Clapper* is silent in disclosing or teaching the features of receiving the selection input for the image, displaying the menu with the image, and receiving the selection input for the location-based service to provide that service. *Clapper* merely states "[n]ext, a digital map may be displayed as indicated at 106. The map may be a digital map with a point corresponding to the location of the currently recorded landmark." *Clapper at* col. 5, lines 34-36. There is no disclosure related to any menu displayed and input for an image.

The other applied references, i.e., *Basir* and *Haruki*, either alone or in combination, do not disclose or teach the aforementioned features of claim 3.

Each of independent claims 5 and 17 recites features corresponding to the aforementioned features of claim 3.

Therefore, at least for the features of receiving the selection input for the image, displaying the menu with the image, and receiving the selection input for the location-based service to provide that service, independent claims 3, 5 and 17 are clearly distinguished from *Clapper*, *Basir* and *Haruki*, either alone or in combination. Applicant respectfully submits that the rejections of independent claim 3, 5 and 17 are overcome. The rejections of dependent claims 2, 4, 6-14, 16 and 18-23 are also overcome at least for the dependencies on independent claim 3, 5 or 17.

Withdrawal of the rejections under35 U.S.C. §103(a) is respectfully requested.

In addition, claim 6 now recites, *inter alia*, "the location-based service is a guiding service", "transmitting a service request signal and the location data to a navigation system", "the navigation system provides a navigation data corresponding to the location data, as the location-based service data" and "providing the guiding service by means of a navigator of the another terminal, which is displayed on a display section of the another terminal," which find support at least in paragraph [0036] and Fig. 5 of the published application. In some embodiments

according to the above features, when the *selection input for the image* is received, after receiving an input for the guiding service, via a *displayed menu*, the navigator of the another terminal provides the guiding service to the *shot location* (i.e., the location where the selected image is taken). *That is, a user may receive the guiding service only by selecting the image, without input a location information.* These features are not disclosed in or taught by *Clapper*, *Basir* and *Haruki*, either alone or in combination.

Therefore, claim 6 is further and separately patentable over *Clapper*, *Basir* and *Haruki*, either alone or in combination.

Withdrawal of the rejection of claim 6 under 35 U.S.C. §103(a) is further requested.

New Claims

Dependent claims 24 and 25, depending from independent claim 5 or 17 and including further patentable features, are considered patentable at least for this feature and/or the reason(s) advanced with respect to independent claim 5 or 17. New claims 24 and 25 find support at least in paragraph [0036] of the published application.

Conclusion

It is respectfully submitted that the present application is in condition for allowance. A swift Notice to that effect is earnestly solicited.

If any issues remain, the Examiner is invited to telephone the undersigned Applicants' attorney of record, to resolve the same.

Otherwise, the claims are believed to be in condition for appeal.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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YSH/SYK/ja

Electronic Acknowledgement Receipt

EFS ID:	26893038
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	Location-Based Service Method and System Using Location Data Included in Image Data
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Jeneen Adamo
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	12-SEP-2016
Filing Date:	27-MAR-2008
Time Stamp:	12:46:45
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		F-Amendment.pdf	71954 76a882ac769946b3d85b83286f69e77b1d6956b1	yes	13

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	8
	Applicant Arguments/Remarks Made in an Amendment	9	13
Warnings:			
Information:			
	Total Files Size (in bytes):	71954	

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/911,879	Filing Date 03/27/2008	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	09/12/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
ROZENIA HARMON

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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NOTICE OF ALLOWANCE AND FEE(S) DUE

22429 7590 12/16/2016

HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314

EXAMINER
WOO, KUO-KONG

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 12/16/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

TITLE OF INVENTION: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	03/16/2017

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22429 7590 12/16/2016
HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

TITLE OF INVENTION: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	03/16/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
WOO, KUO-KONG	2628	455-456200

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

22429 7590 12/16/2016

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EXAMINER
WOO, KUO-KONG

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 12/16/2016

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 11/911,879	Applicant(s) CHOI ET AL.	
	Examiner KUO WOO	Art Unit 2628	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/12/2016*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *2-14 and 16-25*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/ANDREW SASINOWSKI/ Primary Examiner, Art Unit 2622	/KUO WOO/ Examiner, Art Unit 2628

ALLOWANCE

Response to Arguments

1. Applicant's arguments filed on 9/12/2016, with respect to place this application in condition for allowance has been fully considered. The amendments overcome non-final rejection the followings set forth in remarks, mailed on 6/13/2016.

Allowable Subject Matter

2. Claims 2-14, and 16-25 are allowed.

3. The following is an examiner statement of reason for allowance:

Claims 3 and 17 are allowable over the prior art of record. Prior arts did not teach:

"receiving, at the another terminal, a selection input for an image corresponding to the second image data, from the user", "displaying, at the another terminal, an image corresponding to the first image data, and a menu inquiring about whether to select a location-based service", "receiving, at the another terminal, via the displayed menu, a selection input for the location-based service, from the user", "receiving, at the another terminal, location-based service data corresponding to the location data of the selected second image data" and "providing the location-based service to the another terminal by using the received location-based service data,"

When the selection input for the image corresponding to the second image data is received, the image corresponding to the first image data, and the menu inquiring about whether to select the location-based service are displayed. Then, when the

selection input for the location-based service is received via the displayed menu, the location-based service is provided.

The dependent claims depends upon claims, and thus they are also allowed at least for their dependence.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nitin Patel can be reached on 571-272-7677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2628

/ANDREW SASINOWSKI/
Primary Examiner, Art Unit 2622

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	Art Unit
	KUO WOO	2698

CPC- SEARCHED		
Symbol	Date	Examiner
G06F17/30265	6/7/2016	kw

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456,456.2	10/4/2010,3/23/2011	KW
701	211	10/4/2010	KW
358	302	10/04/2010	KW
345	638	10/4/2010	KW
342	357.2	8/29/2012	kw
340	539.13	8/29/2012	kw
348	207.2	8/29/2012	kw

SEARCH NOTES		
Search Notes	Date	Examiner
Plus search	10/4/2010	KW
East search	10/05/2010, 8/29/2012	KW
PCT search	10/4/2010,3/23/2011	KW
Consulted with PE N Mitchell for final rejection	12/16/2012	KW
Consulted with PE Nathan Mitchell for non final office action	6/1/2016	kw
Consulted with PE Danh Le for allowability	12/6/2016	KW

/KUO WOO/ Examiner.Art Unit 2628	

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**
455/456 and	G06F17/30265 and east interference search	12/7/2016	kw

/KUO WOO/ Examiner.Art Unit 2628	

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BIB DATA SHEET

CONFIRMATION NO. 2595

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
11/911,879	03/27/2008 RULE	455	2628	4900-0009

APPLICANTS

INVENTORS

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**** CONTINUING DATA ***************************

This application is a 371 of PCT/KR2006/001444 04/19/2006

**** FOREIGN APPLICATIONS ***************************

REPUBLIC OF KOREA 10-2005-0032452 04/19/2005

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****

04/08/2008

Foreign Priority claimed ☑ Yes ☐ No 35 USC 119(a-d) conditions met ☑ Yes ☐ No Verified and Acknowledged /KUO WOO/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		KOREA, REPUBLIC OF	5	23	3 ~~2~~

ADDRESS

HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314
UNITED STATES

TITLE

Location-Based Service Method and System Using Location Data Included in Image Data

FILING FEE RECEIVED		
1210	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L162	12	L161 and location and compress$3 and stor$3 and image	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
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L159	4420	(image or photo)with location and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L158	5	L157 and base station and position	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L157	17	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
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L154	6722	455/456.2	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L153	133	"6437797"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
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L148	1	"6023241".pn. and excursion and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L147	1	"6023241".pn. and excursion and location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L146	1	"6023241".pn. and excursion	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L145	8	L142 and (latitude and longitude) with location and positioning system	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L144	9	L142 and (latitude and longitude) with location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
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L141	1	L137 and map$4 with location and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
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L125	5	L122 and location and compress$3 and stor$3 and image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L124	12	L122 and location and compress$3 and stor$3 and image	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
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L119	0	(smart phone or PDA) and guiding service and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L118	4420	(image or photo)with location and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L117	38	("20040192309" | "20040203998" | "20060111084" | "20070149133" | "20070249316" | "7072657").PN. OR ("7437158").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2016/12/07 18:10
L116	1	"7437158".pn.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L115	41	L112 and (image or photo) and location and map and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L114	92	L112 and (image or photo) and location and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L113	108	L112 and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L112	8076	smart phone with GPS	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L111	4	("20020049064" | "20020101619" | "20020101619" | "6199014" | "6437797" | "6437797").PN.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L110	1	"11911879" and transmit and first image and second image and user	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L109	1	"11911879" and transmit and first	US-PGPUB;	ADJ	ON	2016/12/07

		image and second image	USPAT			18:10
L108	1	L104 and base station and position system	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L107	5	L104 and base station and position	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L106	5	L104 and base station	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L105	3	L104 and route and traffic	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L104	17	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L103	168	455/456.2 and image and map and guid$3 and location and GPS and camera	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L102	304	455/456.2 and image and map and guid$3 and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L101	284	455/456.2 and image and map and guide and location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L100	6722	455/456.2	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L99	344	("4937751" | "4951211" | "4992947" | "4994971" | "5043902" | "5103400" | "5214793" | "5381338" | "5396431" | "5442557" | "5537323" | "5559949" | "5587911" | "5596494" | "5610822" | "5614898" | "5646629" | "5648768" | "5659469" | "5689252").PN. OR ("6199014").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
L98	2	L95 and image and map and location and GPS not L97	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L97	4	L95 and image and map and location data and latitude	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L96	4	L95 and image and map and location data and navigation	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L95	198	(US-5365516-$ or US-5526357-$ or US-5303393-$ or US-5388074-$ or US-6047192-$ or US-5382508-$ or US-5689245-$ or US-5742509-$ or US-4605921-$ or US-4949287-$ or US-4994971-$ or US-5493709-$ or US-5524234-$ or US-5611064-$ or US-5613109-$ or US-5642365-$ or US-5790183-$ or US-5860111-$ or US-5873089-$ or US-5926208-$ or US-5956369-$ or US-5999200-$ or US-6098048-$ or US-6230312-$ or US-4270206-$ or US-4387271-$).did. or (US-4586094-$ or US-4796185-$ or US-4965856-$ or US-4970718-$ or US-5027395-$ or US-5206837-$ or US-5231381-$ or US-5241635-$ or US-	USPAT	ADJ	ON	2016/12/07 18:10

		5283884-$ or US-5375251-$ or US-5402151-$ or US-5450370-$ or US-5491669-$ or US-5519829-$ or US-5625721-$ or US-5648938-$ or US-5703972-$ or US-5872987-$ or US-5886705-$ or US-5913618-$ or US-5922073-$ or US-5941930-$ or US-5973731-$ or US-6021250-$ or US-6085099-$ or US-6088706-$ or US-6119179-$).did. or (US-6134583-$ or US-6219775-$ or US-4252897-$ or US-4266271-$ or US-4288659-$ or US-4298959-$ or US-4350238-$ or US-4359622-$ or US-4433377-$ or US-4499597-$ or US-4530045-$ or US-4569048-$ or US-4615040-$ or US-4755936-$ or US-4791547-$ or US-4802199-$ or US-4817095-$ or US-4829475-$ or US-4933833-$ or US-4949240-$ or US-4973956-$ or US-4975870-$ or US-4979594-$ or US-4999783-$ or US-5016221-$ or US-5179633-$ or US-5293565-$).did. or (US-5301141-$ or US-5305253-$ or US-5353399-$ or US-5388257-$ or US-5408867-$ or US-5410695-$ or US-5428685-$ or US-5459516-$ or US-5465291-$ or US-5493632-$ or US-5497356-$ or US-5537535-$ or US-5541396-$ or US-5548728-$ or US-5559512-$ or US-5576973-$ or US-5592450-$ or US-5596565-$ or US-5602986-$ or US-5606707-$ or US-5617538-$ or US-5619371-$ or US-5623285-$ or US-5634063-$ or US-5644718-$ or US-5657431-$ or US-5671451-$).did. or (US-5684476-$ or US-5699105-$ or US-5710706-$ or US-5712981-$ or US-5726893-$ or US-5734787-$ or US-5748322-$ or US-5748555-$ or US-5768235-$ or US-5818356-$ or US-5825759-$ or US-5850416-$ or US-5860119-$ or US-5870719-$ or US-5889917-$ or US-5930801-$ or US-5936180-$ or US-5955973-$ or US-6026151-$ or US-6041386-$ or US-6043658-$ or US-6049711-$ or US-6070123-$ or US-6078532-$ or US-6081855-$ or US-6091555-$ or US-RE36791-$).did. or (US-6104344-$ or US-6115206-$ or US-6126070-$ or US-6154139-$ or US-6154658-$ or US-6163701-$ or US-6188776-$ or US-6199014-$ or US-6201804-$ or US-6226710-$ or US-6229998-$ or US-6239628-$ or US-6240167-$ or US-6240369-$ or US-4258236-$ or US-4262332-$ or US-4273955-$ or US-4276925-$ or US-4284883-$ or US-4284160-$ or US-4293857-$ or US-4306898-$ or US-RE31069-$ or US-4315101-$ or US-4317010-$ or US-4317168-$ or US-4321683-$).did. or (US-4328544-$ or				

		US-4345315-$ or US-4360265-$ or US-4370730-$ or US-4373198-$ or US-4384195-$ or US-4390974-$ or US-4393448-$ or US-4397569-$ or US-4403119-$ or US-4408271-$ or US-4414645-$ or US-4417317-$ or US-4419384-$ or US-4437672-$ or US-4438507-$ or US-4454383-$ or US-4458332-$ or US-4468750-$ or US-4479092-$ or US-4482902-$ or US-4513390-$ or US-4516206-$ or US-4527262-$ or US-4531311-$ or US-4536647-$ or US-4545576-$).did. or (US-4555699-$ or US-4563096-$ or US-4569034-$ or US-4578535-$ or US-4589100-$ or US-4589081-$ or US-4592036-$ or US-4604750-$ or US-4613913-$ or US-4620446-$).did.				
L86	1	"20020049064"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L85	2	"20020135680"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L84	308	("5124915" | "5414462" | "5517419" | "5596494" | "5878356" | "5894323" | "5904724").PN. OR ("6023241").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
L83	35	("20020036565" | "20020152390" | "20070047770" | "4768099" | "4992887" | "5307297" | "5334823" | "5412727" | "5467403" | "5579393" | "5724155" | "5737491" | "5865745" | "5920317" | "5960155" | "6023241" | "6038012" | "6038333" | "6040783" | "6128398" | "6381348" | "6535243" | "6542627" | "6633223").PN. OR ("7664296").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
L82	139	("4737927" | "5283562" | "5500743" | "5550584" | "5638184" | "5682441" | "5748109" | "5784059" | "5835266").PN. OR ("6437797").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
L81	2	"20020101619"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L80	1	"7664296".pn.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L79	1	"6437797".pn.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L78	133	"6437797"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L77	1	"11911879"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L76	25	L75 and (camera or image)with (GPS or cps or location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/12/07 18:10
L75	31	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10

		or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$ or US-20040229656-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.				
L74	1	"11911879" and first image data and second image data and service and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/12/07 18:10
L73	1	"20040229656"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L72	1	"6023241".pn. and excursion and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L71	1	"6023241".pn. and excursion and location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L70	1	"6023241".pn. and excursion	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L69	8	L66 and (latitude and longitude) with location and positioning system	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L68	9	L66 and (latitude and longitude) with location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L67	15	L66 and latitude and longitude	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L66	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L65	1	L61 and map$4 with location and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L64	1	L61 and map$4 and (computer or service)	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L63	1653436	L61 and map$4 and computer or	US-PGPUB;	ADJ	OFF	2016/12/07

		service	USPAT			18:10
L62	1	L61 and map$4	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L61	1	"6023241".pn.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L60	2	"10/101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L59	1	"10101594" and compress$2	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L58	2	"10101594"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L57	1	"10101594" and compress$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L56	3	L54 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L55	3	L54 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L54	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L53	2	"10/101594"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L52	2	"10101594"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L51	3	L46 and location and (compress$3 and stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L50	15	L46 and location and (compress$3 or stor$3) with image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L49	5	L46 and location and compress$3 and stor$3 and image and GPS and guid$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L48	12	L46 and location and compress$3 and stor$3 and image	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L47	12	L46 and location and compress$3 and stor$3	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L46	30	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$ or US-20120214460-$ or US-20120008838-$ or US-20040236498-$ or US-20060077055-$ or US-	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10

		20090092284-$ or US-20060235611-$ or US-20020093435-$ or US-20030021591-$ or US-20030164796-$ or US-20030164822-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$ or US-7437158-$ or US-8116598-$ or US-6459388-$).did.				
L45	57	("20010014222" | "20010015759" | "20010016849" | "20010051850" | "20010051876" | "20010056326" | "20020007311" | "20020032787" | "20020071677" | "20020093435" | "20020128773" | "20020143762" | "20020198736" | "20030004693" | "20030009281" | "20030021591" | "20030069693" | "20030069893" | "20030078724" | "20030164796" | "20030164822" | "20030184654" | "20030202104" | "20040049345" | "20040054463" | "20040075697" | "4949268" | "5819092" | "5890171" | "5893101" | "5913078" | "6023241" | "6047234" | "6133947" | "6182010" | "6282362" | "6323885" | "6459388" | "6466865" | "6484086" | "6504571" | "6604126" | "6629100" | "6691032" | "6819356" | "6883146" | "6895126" | "6914626" | "6943825" | "6950198" | "6965828" | "6977679" | "7100190" | "7135994" | "7171113" | "7197158").PN. OR ("8116598").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2016/12/07 18:10
L44	260	(smart phone or PDA) and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L43	0	(smart phone or PDA) and guiding service and (image or photo)with location information and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L42	4420	(image or photo)with location and map and GPS and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L41	38	("20040192309" | "20040203998" | "20060111084" | "20070149133" | "20070249316" | "7072657").PN. OR ("7437158").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2016/12/07 18:10
L40	1	"7437158".pn.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L39	41	L36 and (image or photo) and location and map and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L38	92	L36 and (image or photo) and location and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L37	108	L36 and @rlad<"20050419"	US-PGPUB; USPAT	ADJ	OFF	2016/12/07 18:10
L36	8076	smart phone with GPS	US-PGPUB;	ADJ	OFF	2016/12/07

			USPAT			18:10
L35	4	("20020049064" | "20020101619" | "20020101619" | "6199014" | "6437797" | "6437797").PN.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L34	1	"11911879" and transmit and first image and second image and user	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L33	1	"11911879" and transmit and first image and second image	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L32	1	L28 and base station and position system	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L31	5	L28 and base station and position	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L30	5	L28 and base station	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L29	3	L28 and route and traffic	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L28	17	(US-20020101619-$ or US-20020135680-$ or US-20020049064-$).did. or (US-6437797-$ or US-7664296-$ or US-6741864-$ or US-7002625-$ or US-6914626-$ or US-6023241-$ or US-7325061-$ or US-5671451-$ or US-6199014-$ or US-7499799-$ or US-7184611-$ or US-7289812-$ or US-7359724-$ or US-7155338-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L27	168	455/456.2 and image and map and guid$3 and location and GPS and camera	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L26	304	455/456.2 and image and map and guid$3 and location and GPS	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L25	284	455/456.2 and image and map and guide and location	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L24	6722	455/456.2	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L23	344	("4937751" | "4951211" | "4992947" | "4994971" | "5043902" | "5103400" | "5214793" | "5381338" | "5396431" | "5442557" | "5537323" | "5559949" | "5587911" | "5596494" | "5610822" | "5614898" | "5646629" | "5648768" | "5659469" | "5689252").PN. OR ("6199014").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
L22	2	L19 and image and map and location and GPS not L21	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L21	4	L19 and image and map and location data and latitude	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L20	4	L19 and image and map and location data and navigation	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L19	198	(US-5365516-$ or US-5526357-$ or US-5303393-$ or US-5388074-$ or US-6047192-$ or US-5382508-$ or US-5689245-$ or US-5742509-$ or US-4605921-$ or US-4949287-$ or US-4994971-$ or US-5493709-$ or US-5524234-$ or US-5611064-$ or US-5613109-$ or US-5642365-$ or US-5790183-$ or US-	USPAT	ADJ	ON	2016/12/07 18:10

		5873089-$ or US-5926208-$ or US-5956369-$ or US-5999200-$ or US-6098048-$ or US-6230312-$ or US-4270206-$ or US-4387271-$).did. or (US-4586094-$ or US-4796185-$ or US-4965856-$ or US-4970718-$ or US-5027395-$ or US-5206837-$ or US-5231381-$ or US-5241635-$ or US-5283884-$ or US-5375251-$ or US-5402151-$ or US-5450370-$ or US-5491669-$ or US-5519829-$ or US-5625721-$ or US-5648938-$ or US-5703972-$ or US-5872987-$ or US-5886705-$ or US-5913618-$ or US-5922073-$ or US-5941930-$ or US-5973731-$ or US-6021250-$ or US-6085099-$ or US-6088706-$ or US-6119179-$).did. or (US-6134583-$ or US-6219775-$ or US-4252897-$ or US-4266271-$ or US-4288659-$ or US-4298959-$ or US-4350238-$ or US-4359622-$ or US-4433377-$ or US-4499597-$ or US-4530045-$ or US-4569048-$ or US-4615040-$ or US-4755936-$ or US-4791547-$ or US-4802199-$ or US-4817095-$ or US-4829475-$ or US-4933833-$ or US-4949240-$ or US-4973956-$ or US-4975870-$ or US-4979594-$ or US-4999783-$ or US-5016221-$ or US-5179633-$ or US-5293565-$).did. or (US-5301141-$ or US-5305253-$ or US-5353399-$ or US-5388257-$ or US-5408867-$ or US-5410695-$ or US-5428685-$ or US-5459516-$ or US-5465291-$ or US-5493632-$ or US-5497356-$ or US-5537535-$ or US-5541396-$ or US-5548728-$ or US-5559512-$ or US-5576973-$ or US-5592450-$ or US-5596565-$ or US-5602986-$ or US-5606707-$ or US-5617538-$ or US-5619371-$ or US-5623285-$ or US-5634063-$ or US-5644718-$ or US-5657431-$ or US-5671451-$).did. or (US-5684476-$ or US-5699105-$ or US-5710706-$ or US-5712981-$ or US-5726893-$ or US-5734787-$ or US-5748322-$ or US-5748555-$ or US-5768235-$ or US-5818356-$ or US-5825759-$ or US-5850416-$ or US-5860119-$ or US-5870719-$ or US-5889917-$ or US-5930801-$ or US-5936180-$ or US-5955973-$ or US-6026151-$ or US-6041386-$ or US-6043658-$ or US-6049711-$ or US-6070123-$ or US-6078532-$ or US-6081855-$ or US-6091555-$ or US-RE36791-$).did. or (US-6104344-$ or US-6115206-$ or US-6126070-$ or US-6154139-$ or US-6154658-$ or US-6163701-$ or US-6188776-$ or US-6199014-$ or US-6201804-$ or US-6226710-$ or US-6229998-$ or US-						

		6240167-$ or US-6240369-$ or US-4258236-$ or US-4262332-$ or US-4273955-$ or US-4276925-$ or US-4284883-$ or US-4284160-$ or US-4293857-$ or US-4306898-$ or US-RE31069-$ or US-4315101-$ or US-4317010-$ or US-4317168-$ or US-4321683-$).did. or (US-4328544-$ or US-4345315-$ or US-4360265-$ or US-4370730-$ or US-4373198-$ or US-4384195-$ or US-4390974-$ or US-4393448-$ or US-4397569-$ or US-4403119-$ or US-4408271-$ or US-4414645-$ or US-4417317-$ or US-4419384-$ or US-4437672-$ or US-4438507-$ or US-4454383-$ or US-4458332-$ or US-4468750-$ or US-4479092-$ or US-4482902-$ or US-4513390-$ or US-4516206-$ or US-4527262-$ or US-4531311-$ or US-4536647-$ or US-4545576-$).did. or (US-4555699-$ or US-4563096-$ or US-4569034-$ or US-4578535-$ or US-4589100-$ or US-4589081-$ or US-4592036-$ or US-4604750-$ or US-4613913-$ or US-4620446-$).did.				
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L6	139	("4737927" | "5283562" | "5500743" | "5550584" | "5638184" | "5682441" | "5748109" | "5784059" | "5835266").PN. OR ("6437797").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/12/07 18:10
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L2	133	"6437797"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10
L1	1	"11911879"	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:10

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L165	1	first image and second image and receiv$3 and display$3 and predetermined location and location based service .clm.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:20
L163	213	first image and second image and receiv$3 and display$3 and predetermined location .clm.	US-PGPUB; USPAT	ADJ	ON	2016/12/07 18:12

12/7/2016 6:22:01 PM
C:\Users\kwoo\Documents\EAST\Workspaces\11911879.wsp

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	**Art Unit**
	KUO WOO	2628

CPC						
Symbol					**Type**	**Version**
G06F	/	17	/	30265	F	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
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/KUO WOO/ Examiner.Art Unit 2628	12/07/2016	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	23	
/ANDREW SASINOWSKI/ Primary Examiner.Art Unit 2622	12/09/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	3	3

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	**Art Unit**
	KUO WOO	2628

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
455	456.2	H	0	4	W	24 / 00 (2009.0)						
CROSS REFERENCE(S)												
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

/KUO WOO/ Examiner.Art Unit 2628	12/07/2016	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	23	
/ANDREW SASINOWSKI/ Primary Examiner.Art Unit 2622	12/09/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	3	3

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11911879	CHOI ET AL.
	Examiner	**Art Unit**
	KUO WOO	2628

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
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2	2	17	18												
1	3	18	19												
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16	16														

/KUO WOO/ Examiner.Art Unit 2628	12/07/2016	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	23	
/ANDREW SASINOWSKI/ Primary Examiner.Art Unit 2622	12/09/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	3	3

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22429 7590 12/16/2016
HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	03/27/2008	Jin-Seung Choi	4900-0009	2595

TITLE OF INVENTION: LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	03/16/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
WOO, KUO-KONG	2628	455-456200

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Hauptman Ham, LLP
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: SK TELECOM CO., LTD.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): SEOUL, REPUBLIC OF KOREA

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☒ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 07-1337 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Yoon S. Ham/ Date February 16, 2017

Typed or printed name Yoon S. Ham Registration No. 45307

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Electronic Patent Application Fee Transmittal

Application Number:	11911879
Filing Date:	27-Mar-2008
Title of Invention:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA
First Named Inventor/Applicant Name:	Jin-Seung Choi
Filer:	Yoon Ham/Sophia Lee
Attorney Docket Number:	4900-0009

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt	
EFS ID:	28381325
Application Number:	11911879
International Application Number:	
Confirmation Number:	2595
Title of Invention:	LOCATION-BASED SERVICE METHOD AND SYSTEM USING LOCATION DATA INCLUDED IN IMAGE DATA
First Named Inventor/Applicant Name:	Jin-Seung Choi
Customer Number:	22429
Filer:	Yoon Ham/Sophia Lee
Filer Authorized By:	Yoon Ham
Attorney Docket Number:	4900-0009
Receipt Date:	16-FEB-2017
Filing Date:	27-MAR-2008
Time Stamp:	16:21:08
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$960
RAM confirmation Number	021717INTEFSW16221000
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	4900-0009_F_IssueFee_Transmittal.pdf	126837 29714c6693b9424ef7862d3dd313fed27f03c9b1	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30726 e2727b165899a3c60f793e791a8a19daea984f4d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	157563		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	11911879
Filing Date	2008-03-27
First Named Inventor	Jin-Seung CHOI et al.
Art Unit	2617
Examiner Name	Kuo-Kong Woo
Attorney Docket Number	4900-0009

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
Change(s) applied to document, /J.H./ 12/27/2016	1	6437797		2002-08-20	Ota ~~FUJI PHOTO FILM CO., LTD~~.	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020101619		2002-08-01	HISAYOSHI TSUBAKI ET AL.	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	06-261244	JP		1994-09-16	TAMRON CO LTD		☐
	2	2000-235580	JP		2000-08-29	HITACHI ZOSEN CORP		☐

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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/911,879	04/04/2017	9613060	4900-0009	2595

22429 7590 03/15/2017

HAUPTMAN HAM, LLP
2318 Mill Road
Suite 1400
ALEXANDRIA, VA 22314

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 2200 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Jin-Seung Choi, Seoul, KOREA, REPUBLIC OF;
Jae-Chul Lim, Seoul, KOREA, REPUBLIC OF;
Jae-Bum Park, Seoul, KOREA, REPUBLIC OF;
Hong-Keun JI, Seoul, KOREA, REPUBLIC OF;
Jong-Ho Kim, Seoul, KOREA, REPUBLIC OF;
Do-Wan Kim, Seoul, KOREA, REPUBLIC OF;
Hyun-Jun Oh, Seoul, KOREA, REPUBLIC OF;
Dong-Won Na, Gyeonggi-do, KOREA, REPUBLIC OF;
Won-Hee Sull, Seoul, KOREA, REPUBLIC OF;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT8057974

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ARISTA HOLDINGS CO. LTD.	05/02/2023

RECEIVING PARTY DATA

Name:	HERMES IP MANAGEMENT LLC
Street Address:	5204 BLUEWATER DR.
City:	FRISCO
State/Country:	TEXAS
Postal Code:	75036

PROPERTY NUMBERS Total: 4

Property Type	Number
Patent Number:	9613060
Patent Number:	8537977
Patent Number:	7593720
Patent Number:	8347314

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 8327259569
Email: do@longhornip.com
Correspondent Name: DO KIM
Address Line 1: 8105 RASOR BLVD STE 210
Address Line 4: PLANO, TEXAS 75024

NAME OF SUBMITTER:	KHALED FEKIH-ROMDHANE
SIGNATURE:	/Khaled Fekih-Romdhane/
DATE SIGNED:	07/14/2023
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3
source=Hermes Assignment#page1.tif
source=Hermes Assignment#page2.tif
source=Hermes Assignment#page3.tif

CONFIDENTIAL

Addendum A

Patent Assignment

This patent assignment ("Assignment") is entered into as of May 2, 2023 (the "Effective Date"), by and between Arista Holdings Co. Ltd., with a principal place of business at 12., Koaren Bldg, 14, Seolleung-ro 94-gil, Gangnam-gu, Seoul, Republic of Korea ("Assignor"), and Hermes IP Management LLC, a Texas Limited Liability Company, with principal place of business at 5204 Bluewater Dr., Frisco, TX 75036, USA ("Assignee").

For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby irrevocably assigns, sells, grants, transfers and conveys and agrees to assign, sell, grant, transfer, and convey to Assignee, and Assignee hereby accepts and receives, all right, title, and interest throughout the world in and to:

(a) the issued patents and pending patent applications identified on Schedule 1 attached hereto and any issued patent or patent application that directly or indirectly claims or is amended to claim priority to any of the above, in whole or in part (the "Patents");

(b) to the extent not included in (a), all issued patents, rights to inventions and pending and future applications for patents under U.S. law or regulation or of any foreign country with respect to the patentable inventions from which such Patents arise, including without limitation utility patents, utility models, design patents, invention certificates, provisionals, continuations, divisionals, continuations-in-part, reexaminations, reissues, extensions and renewals, in all countries of the world, as well as any patents and patent applications to which any of the Patents or any of the foregoing directly or indirectly claim priority, in whole or in part (subcategories (a) and (b) collectively, the "Patents");

(c) all causes of action (whether known or unknown or whether currently pending, filed or otherwise) and other enforcement rights under or on account of the Patents, including without limitation all causes of action and other enforcement rights for damages, injunctive relief, and any other remedies of any kind for past, current and future infringement;

(d) all rights to collect royalties or other payments under or on account of the Patents and the foregoing subcategory (c).

Assignor agrees upon request (and at the expense) of Assignee to, and if Assignor is unable or unwilling to do so authorizes Assignee to act in Assignor's name to: execute all oaths, assignments, powers, and any other papers necessary to perform Assignor's obligations hereunder, testify in any proceeding, and otherwise take any action, and fully cooperate with

Assignee to perform Assignor's obligations hereunder, in each case, related to securing and enforcing Assignee's rights related to this Assignment.

The terms and conditions of this Assignment will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, the parties hereto have caused this Assignment to be executed as of the Effective Date. The individuals signing for the parties represent and warrant that he or she has authority to sign for and enter into this Assignment on behalf of the respective parties.

Assignor:

Arista Holdings Co. Ltd.

By: Jungkil Nam

Name: Jungkil Nam

Title: CEO

Date: May 2, 2023

Assignee:

Hermes IP Management LLC

By: Khaled Fekih Romdhane

Name: Khaled Fekih-Romdhane

Title: Manager

Date: May 3, 2023

Addendum A

PATENTS AND PATENT APPLICATIONS

	Region	Application Number	Application Date	Issue Number	Title of US Patent	Status
1	US	11/911,879	Apr. 19, 2006	9,613,060	Location-based service method and system using location data included in image data	Issued
	CN	200680012984.9	Apr. 19, 2006	-		Rejected
	PCT	PCT-KR2006-001444	Apr. 19, 2006	-		Expired
	KR	10-2005-0032452	Apr. 19, 2005	0735463		Issued
2	US	12/525,050	Apr. 04, 2008	8,537,977	Apparatus and method for voice processing in mobile communication terminal	Issued
	CN	200880009418.1	Apr. 04, 2008	101641871		Expired
	JP	2009-548173	Apr. 04, 2008	4847590		Expired
	PCT	PCT-KR2008-001942	Apr. 04, 2008	-		Expired
	KR	10-2008-0016382	Feb. 22, 2008	1450108		Expired
	KR	10-2007-0035046	Apr. 10, 2007	0798623		Expired
3	US	10/524,679	Apr. 10, 2004	7593720	Method and an apparatus for providing multimedia services in mobile terminal	Issued
	IN	00182/MUMNP/2005	Apr. 10, 2004	215147		Issued
	IL	166736	Apr. 10, 2004	166736		Issued
	ID	W-00200500619	Apr. 10, 2004	IDP0023490		Issued
	MY	PI 20051238	Apr. 10, 2004	142196		Issued
	MX	PA/a/2005/002647	Apr. 10, 2004	270591		Issued
	MN	3508	Apr. 10, 2004	2642		Issued
4	US	12/656,872	Feb. 18, 2010	8,347,314	Method for managing java applications	Issued
	PCT	PCT-KR2010-001015	Feb. 18, 2010	-		Expired
	KR	10-2009-0014161	Feb. 20, 2009	10-1144346		Issued