Jeffrey A. Silvestri (NV Bar No. 5779)
MCDONALD CARANO WILSON LLP
2300 West Sahara Avenue
Suite 1000
Las Vegas, NV 89102
Phone: (702) 873-4100
Facsimile: (702) 873-9966
Email: jsilvestri@mcdonaldcarano.com

Frederick S. Berretta (*pro hac vice*)
Peter Law (*pro hac vice*)
KNOBBE, MARTENS, OLSON & BEAR, LLP
12790 El Camino Real
San Diego, CA 92130
Phone: (858) 707-4000
Facsimile: (858) 707-4001
Email: fred.berretta@knobbe.com
Email: peter.law@knobbe.com

Attorneys for Plaintiff
SILVER STATE INTELLECTUAL TECHNOLOGIES, INC.

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF NEVADA

SILVER STATE INTELLECTUAL TECHNOLOGIES, INC., a Nevada corporation, Plaintiff and Counterdefendant, v. FOURSQUARE LABS, INC., a Delaware corporation, Defendant and Counterclaimant.	Case No. 2:12-cv-01308-GMN-PAL **THIRD AMENDED COMPLAINT FOR PATENT INFRINGEMENT** **JURY DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Pursuant to the Court's September 27, 2013, Order (DOC. 60) Plaintiff SILVER STATE INTELLECTUAL TECHNOLOGIES, INC., by and through its undersigned attorneys, hereby complains of Defendant FOURSQUARE LABS, INC. for infringement of the United States Patents identified herein, and files this Third Amended Complaint, and alleges as follows:

JURISDICTION AND VENUE

1. This is an action for patent infringement arising under the patent laws of the United States, Title 35, United States Code, and more particularly 35 U.S.C. §§ 271 and 281.

2. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

3. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c), and 1400(b).

THE PARTIES

4. Plaintiff SILVER STATE INTELLECTUAL TECHNOLOGIES, INC. (hereinafter, "SILVER STATE") is a Nevada corporation with its principal place of business at 9811 Charleston Blvd., #2-787, Las Vegas, Nevada 89117.

5. SILVER STATE is the owner by assignment of United States Patent No. 7,343,165, entitled GPS PUBLICATION APPLICATION SERVER, duly and lawfully issued on March 11, 2008 ("the '165 patent"), attached hereto as Exhibit A; among other patents and pending patent applications.

6. Upon information and belief, Defendant FOURSQUARE LABS, INC. (hereinafter, "FOURSQUARE LABS") is a Delaware corporation with a principal place of business at 568 Broadway, 10th Floor, New York, New York 10012.

7. Upon information and belief, FOURSQUARE LABS makes, uses, and provides in the United States the "foursquare" brand location-based social networking system that SILVER STATE alleges infringes the '165 patent, as alleged further herein below. SILVER STATE reserves the right to amend its Complaint to include allegations of

infringement of additional patents owned by SILVER STATE based on the results of discovery in this matter.

8. Upon information and belief, FOURSQUARE LABS does business and provides its system and services in this judicial district, and has committed acts of infringement in this judicial district.

9. FOURSQUARE LABS has been aware of the '165 patent since at least October 15, 2012, when FOURSQUARE LABS acknowledged receipt of the original Complaint filed herein, and likely as early as July 25, 2012, when the original Complaint was filed. Accordingly, SILVER STATE's claims for relief based upon allegations of indirect infringement are limited to the period after July 25, 2012, unless discovery reveals that FOURSQUARE LABS learned of the '165 patent prior to that date.

FIRST CLAIM FOR RELIEF

(Direct Infringement of the '165 Patent)

10. SILVER STATE realleges and incorporates herein by reference the allegations stated in paragraphs 1-9 of this Complaint.

11. Upon information and belief, in violation of 35 U.S.C. § 271(a), FOURSQUARE LABS has directly infringed, and is continuing to directly infringe, one or more claims of the '165 patent by providing its "foursquare" brand location-based social networking system in the United States, including, without limitation, at least direct infringement of Claim 1.

12. For example, upon information and belief, FOURSQUARE LABS has directly infringed independent Claim 1 of the '165 patent by carrying out the claimed method of: (a) "allocating a user-specific space in memory accessible over a computer network to a specific user," for example, when foursquare users register for an account and provide information about themselves to foursquare; (b) "associating a mobile communication device with a user," for example, when foursquare users register for an account the foursquare system associates the user's smartphone to the user's name and account; (c) "determining a geographic location of the user by receiving location information provided by the a mobile

communication device," for example, when receiving the location of a user determined by the user's smartphone when the user checks in to a location on foursquare; (d) "storing data indicative of the location of the user in the user-specific space," for example, when storing the geographic location of a user who has checked into a location in the user-specific memory space; (e) "receiving, from the user, additional data regarding the user, the additional data being related to the geographic location of the user," for example, when receiving a message from the user related to the location where the user is checked in, such as a recommendation about the location or what the user is doing at the location; (f) "storing the additional data regarding the user in the user-specific space," for example, when storing the user's recommendations about a location or what the user is doing at the location in the user-specific memory space; (g) "receiving from the user an access list of possible requesters of the data and the additional data," for example, when foursquare users establish a list of friends with whom the user is willing to share his or her location information and recommendations about a location; (h) "storing the access list of possible requesters of the data and the additional data in the user-specific space," for example, when storing the user's lists of friends in the user-specific memory space; and (i) "providing the data indicative of the location of the user and the additional data regarding the user to possible requesters on the access list," for example, when friends of the user are provided information about the user being at the same location as the friend or nearby, and the recommendations or other information that the user has provided related to his or her location.

13. Upon information and belief, FOURSQUARE LABS's infringement of the '165 patent has been, and will continue to be, willful and deliberate, making this case an exceptional case under 35 U.S.C. § 285, because FOURSQUARE LABS has failed to allege any factual basis in support of a good faith defense that it does not infringe the '165 patent, or that the '165 patent is invalid. For example, in response to the original Complaint filed herein, FOURSQUARE LABS specifically requested that SILVER STATE provide more detailed infringement allegations. Despite SILVER STATE providing more detailed infringement allegations in the Amended Complaint filed herein, FOURSQUARE LABS

simply denied the detailed allegations of each paragraph of the Amended Complaint without any explanation, and provided only cursory counterclaims, which lack any substantive allegations as to noninfringement or invalidity. Accordingly, FOURSQUARE LABS's answer and counterclaims for non-infringement and invalidity fail to allege any factual basis in support of a good faith defense that FOURSQUARE LABS does not infringe or that the '165 patent is invalid. Therefore, upon information and belief, no objectively reasonable basis exists that FOURSQUARE LABS is not willfully infringing the '165 patent.

14. As a direct and proximate result of FOURSQUARE LABS's direct willful infringement of the '165 patent, SILVER STATE has been and continues to be damaged.

15. SILVER STATE has been and will continue to be irreparably harmed by FOURSQUARE LABS's direct infringement of the '165 patent unless enjoined by this Court.

SECOND CLAIM FOR RELIEF

(Induced Infringement of the '165 Patent)

16. SILVER STATE realleges and incorporates herein by reference the allegations stated in paragraphs 1-15 of this Complaint.

17. Upon information and belief, in violation of 35 U.S.C. § 271(b), FOURSQUARE LABS has indirectly infringed, and is continuing to indirectly infringe, one or more claims of the '165 patent by providing its "foursquare" brand location-based social networking system in the United States, including, without limitation, at least indirect infringement of Claim 2 of the '165 patent.

18. For example, upon information and belief, since at least July 25, 2012, FOURSQUARE LABS has knowingly indirectly infringed independent Claim 2 of the '165 patent by inducing users of the foursquare system to directly infringe Claim 2 by using or putting into service the claimed system comprising: (a) "a personal communication device (PCD) comprising a GPS receiver and wireless communication capability," for example, the user's smartphone; (b) "a GPS server receiving information indicating a geographic location and a unique identifier associated with the PCD, the GPS server providing the PCD location and the unique identifier associated with the PCD to an application server," for example, the

foursquare servers that process the location data received from the user when he or she checks into a location; (c) "the application server configured to execute a program upon receiving the geographic location and the unique identifier information associated with the PCD to update a user specific data space with a current geographic location and the unique identifier associated with the PCD," for example, the foursquare servers that process the location data received from the user when he or she checks into a location to update the information in the user specific data space; (d) "the application server further configured to allow different users different access to the application server based on the identity of a user," for example, the foursquare servers that only allow the user's location and other information provided by the user to be shared with the friends of the user and no other users of the foursquare system; (e) "wherein the application server is further configured to store information received from and concerning an individual associated with the PCD in the user specific data space, the stored information in the user specific data space including an access list of possible requesters of information concerning the individual associated with the PCD, the access list being received from the individual associated with the PCD," for example, the foursquare servers that are configured to store the information about a user in the user specific data space including the user's list of friends that have access to the user's location; and (f) "wherein the information stored in the user specific data space includes additional information related to the geographic location of the individual associated with the PCD," for example, the foursquare servers that are configured to store the user's recommendations about a location or what the user is doing at the location in the user specific data space.

19. Additionally, for example, upon information and belief, FOURSQUARE LABS, having knowledge of the '165 patent and the content of its claims since at least July 25, 2012, intended to induce infringement of at least Claim 2 of the '165 patent by continuing to provide within the United States the foursquare system constituting a material part of the claimed system of Claim 2, e.g., all of the components of Claim 2 other than the personal communication device, and continuing to induce users of the foursquare system to directly infringe Claim 2. FOURSQUARE LABS, having knowledge of the '165 patent, continues to

promote its infringing system on its website. FOURSQUARE LABS provides the foursquare system which includes items (b) – (f) as set forth in paragraph 18. FOURSQUARE LABS further promotes its mobile application ("app"), which FOURSQUARE LABS intends for use on a user's personal communication device. FOURSQUARE LABS provides instructions and links to download the foursquare app on iPhone, Android phones, Blackberry phones, and others on its website. *See*, https://foursquare.com/download, accessed October 1, 2013, a screenshot of which is attached hereto as Exhibit B. A majority of iPhones, Android phones and Blackberry phones are GPS-enabled personal communication devices. Foursquare answers the question "What is Foursquare," on its website, saying:

> [f]oursquare is a free app that helps you and your friends make the most of where you are. When you're out and about, use Foursquare to share and save the places you visit. And, when you're looking for inspiration for what to do next, we'll give you personalized recommendations and deals based on where you, your friends, and people with your tastes have been.

https://foursquare.com/about, accessed October 1, a screenshot of which is attached hereto as Exhibit C. By its own definition, FOURSQUARE LABS intends to induce users to download the foursquare app to their mobile phones, and use their mobile phones to check-in places and provide location specific and other information to the foursquare system. FOURSQUARE LABS also prominently features the request "Join over 40 million people using our app to keep up and meet up with friends," and boasts "over 4.5 billion check-ins, with millions more every day." https://foursquare.com/, accessed October 1, a screenshot of which is attached hereto as Exhibit D; https://foursquare.com/about. Since FOURSQUARE LABS has known of the '165 patent since at least July 25, 2013, and because FOURSQUARE LABS specifically promotes its mobile app and encourages users to check-in and use the foursquare system via users' personal communication devices, FOURSQUARE LABS has manifested a probable intent to induce infringement of the '165 patent, and accordingly has induced, and continues to actively induce infringement of at least Claim 2 of the '165 patent.

/ / /

20. Upon information and belief, FOURSQUARE LABS's induced infringement of the '165 patent has been, and will continue to be, willful and deliberate, making this case an exceptional case under 35 U.S.C. § 285, because FOURSQARE LABS has failed to allege any factual basis in support of a good faith defense that it does not induce infringement of the '165 patent, or that the '165 patent is invalid.

21. As a direct and proximate result of FOURSQUARE LABS's willful induced infringement of the '165 patent, SILVER STATE has been and continues to be damaged.

22. SILVER STATE has been and will continue to be irreparably harmed by FOURSQUARE LABS's induced infringement of the '165 patent unless enjoined by this Court.

THIRD CLAIM FOR RELIEF

(Contributory Infringement of the '165 Patent)

23. SILVER STATE realleges and incorporates herein by reference the allegations stated in paragraphs 1-22 of this Complaint.

24. Upon information and belief, in violation of 35 U.S.C. § 271(c), FOURSQUARE LABS has contributorily infringed, and is continuing to contributorily infringe, one or more claims of the '165 patent by providing its "foursquare" brand location-based social networking system in the United States, including, without limitation, at least contributory infringement of Claim 2.

25. For example, upon information and belief, since at least October 15, 2012, and likely earlier, FOURSQUARE LABS has knowingly contributorily infringed independent Claim 2 of the '165 patent by providing within the United States the foursquare system constituting a material part of the claimed system of Claim 2, e.g., all of the components of Claim 2 other than the personal communication device, as the foursquare system has been described herein above in paragraphs 12 and 18, knowing the same to be especially made or especially adapted for use in an infringement of the '165 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use absent combination with a personal communication device.

26. Additionally, upon information and belief, the components provided by FOURSQUARE LABS to enable the foursquare service whereby a user "checks in" at a particular location using a personal communication device and provides additional information related to the geographic location of the individual associated with the personal communication device, as described in paragraphs 12 and 18 above, have no substantial non-infringing uses absent combination with the user's personal communication device. The foursquare system, as described above in paragraphs 12 and 18, is dependent on users' use of personal communications and check-ins in order to provide the features of the foursquare system. As described in paragraph 19 above, Foursquare defines itself as "a free app that helps you and your friends make the most of where you are. When you are out and about, use Foursquare to share and save the places you visit." Ex. C. FOURSQUARE LABS wants users to download and use the foursquare app on users' personal communication devices. *See* Ex. B. FOURSQUARE LABS provides "window clings" for businesses to put up at their business establishments which encourage users to check-in, which is done using a personal communication device. http://support.foursquare.com/entries/21754438-Can-I-get-a-window-cling-, accessed Oct. 1, 2013, a screenshot of which is attached hereto as Exhibit E. The entire foursquare system relies on users using their personal communication devices. For example, FOURSQUARE LABS states on its blog,

> "The idea behind Foursquare has always been that, someday, hundreds of millions of people will carry software in their pocket that lets them know when friends are nearby. . . With over 4 billion check-ins, our location accuracy has hugely improved. With more than 32 million tips, you've told us about great things worth discovering all around the world. . . Because it's [foursquare] powered by billions of check-ins, it's also smart . . . ."

http://blog.foursquare.com/, accessed Oct. 2, 2013, a screenshot of which is attached hereto as Exhibit F. Therefore, the foursquare system is entirely built on users using personal communication devices. Without the use of personal communication devices and check-

ins, the foursquare system would lose its key feature, be useless, and have no substantial non-infringing uses. Therefore, the components provided by FOURSQUARE LABS to enable the foursquare check in service have no substantial, non-infringing uses other than to perform the claimed invention of the '165 patent.

27. Upon information and belief, FOURSQUARE LABS's contributory infringement of the '165 patent has been, and will continue to be, willful and deliberate, making this case an exceptional case under 35 U.S.C. § 285, because FOURSQUARE LABS has failed to allege any factual basis in support of a good faith defense that it does not contributorily infringe the '165 patent, or that the '165 patent is invalid.

28. As a direct and proximate result of FOURSQUARE LABS's willful contributory infringement of the '165 patent, SILVER STATE has been and continues to be damaged.

29. SILVER STATE has been and will continue to be irreparably harmed by FOURSQUARE LABS's contributory infringement of the '165 patent unless enjoined by this Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff SILVER STATE prays for relief as follows:

A. That FOURSQUARE LABS be adjudged to have directly infringed the '165 patent under 35 U.S.C. § 271(a);

B. That FOURSQUARE LABS be adjudged to have induced infringement the '165 patent under 35 U.S.C. § 271(b);

C. That FOURSQUARE LABS be adjudged to have contributorily infringed the '165 patent under 35 U.S.C. § 271(c);

D. That FOURSQUARE LABS, its subsidiaries, affiliates, officers, agents, servants, employees and attorneys, and all those persons in active concert or participation with any of them be permanently restrained and enjoined under 35 U.S.C. § 283 from directly and indirectly infringing the '165 patent;

/ / /

E. That the Court award Plaintiff SILVER STATE recovery of damages to compensate it for FOURSQUARE LABS's infringement of SILVER STATE's patent as alleged herein, pursuant to 35 U.S.C. § 284;

F. That FOURSQUARE LABS be adjudged to have willfully infringed the '165 patent under 35 U.S.C. § 271, and that the Court treble the amount of actual damages pursuant to 35 U.S.C. § 284;

G. That this action be adjudged an exceptional case, and that the Court award SILVER STATE its reasonable attorney's fees incurred in this action, pursuant to 35 U.S.C. § 285;

H. That the Court order FOURSQUARE LABS to provide an accounting and to pay supplemental damages to SILVER STATE, including without limitation pre-judgment and post-judgment interest, and costs of suit herein pursuant to 35 U.S.C. § 284; and

I. That Plaintiff SILVER STATE have such other and further relief as this Court may deem just and proper.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: October 4, 2013

By: s/ Frederick S. Berretta
Frederick S. Berretta (*pro hac vice)*
Peter Law (*pro hac vice)*

and

MCDONALD CARANO WILSON LLP

Andrew P. Gordon
Jeffrey A. Silvestri

Attorneys for Plaintiff
SILVER STATE INTELLECTUAL TECHNOLOGIES, INC.

DEMAND FOR TRIAL BY JURY

Plaintiff SILVER STATE hereby demands a trial by jury on all issues so triable.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: October 4, 2013

By: s/ Frederick S. Berretta
Frederick S. Berretta (*pro hac vice)*
Peter Law (*pro hac vice)*

and

MCDONALD CARANO WILSON LLP

Jeffrey A. Silvestri

Attorneys for Plaintiff
SILVER STATE INTELLECTUAL TECHNOLOGIES, INC.

14681040

PROOF OF SERVICE

I hereby certify that on October 4, 2013, I caused the **THIRD AMENDED COMPLAINT FOR PATENT INFRINGEMENT** to be electronically filed with the Clerk of the Court using the CM/ECF system which will send electronic notification of such filing to the following person(s):

Robert C. Ryan
HOLLAND & HART LLP
5441 Kietzke Lane, Second Floor
Reno, Nevada 89511
Phone: (775) 327-3042
Facsimile: (775) 786-6179
Email: rcryan@hollandhart.com

Christopher B. Hadley
HOLLAND & HART LLP
222 South Main Street, Suite 2200
Salt Lake City, Utah 84101
Telephone: (801) 799-5800
Facsimile: (801) 799-5700
Email: cbhadley@hollandhart.com

Craig R. Smith
LANDO & ANASTASI, LLP
One Main Street, Eleventh Floor
Cambridge, MA 02142
Phone: (617) 395-7000
Facsimile: (617) 395-7070
Email: csmith@lalaw.com

Executed on October 4, 2013, at Los Angeles, California.

Doreen P. Buluran

Exhibit A

US007343165B2

(12) **United States Patent**
Obradovich

(10) **Patent No.: US 7,343,165 B2**
(45) **Date of Patent: Mar. 11, 2008**

(54) **GPS PUBLICATION APPLICATION SERVER**

(75) Inventor: **Michael L. Obradovich**, San Clemente, CA (US)

(73) Assignee: **American Calcar Inc.**, Las Vegas, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 597 days.

(21) Appl. No.: **09/833,969**

(22) Filed: **Apr. 11, 2001**

(65) **Prior Publication Data**

US 2002/0045456 A1 Apr. 18, 2002

Related U.S. Application Data

(60) Provisional application No. 60/196,575, filed on Apr. 11, 2000.

(51) **Int. Cl.**
H04Q 7/20 (2006.01)

(52) **U.S. Cl.** **455/456.1**; 455/461

(58) **Field of Classification Search** .. 455/456.1–456.6, 455/461, 457; 342/357.01, 357.09
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,350,970	A	9/1982	von Tomkewitsch
4,521,857	A	6/1985	Reynolds, III
4,792,803	A	12/1988	Madnick et al.
4,812,843	A	3/1989	Champion, III et al.
4,977,509	A	12/1990	Pitchford et al.
5,043,736	A	8/1991	Darnell et al.
5,119,504	A	6/1992	Durboraw, III
5,124,915	A	6/1992	Krenzel
5,164,904	A	11/1992	Sumner
5,189,632	A	2/1993	Paajanen et al.
5,225,843	A	7/1993	Thompson
5,235,633	A	8/1993	Dennison et al.
5,265,024	A	11/1993	Crabill et al.
5,267,042	A	11/1993	Tsuchiya et al.
5,295,064	A	3/1994	Malec et al.
5,299,132	A	3/1994	Wortham
5,334,974	A	8/1994	Simms et al.
5,335,276	A	8/1994	Thompson et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP	0713317	5/1996

(Continued)

OTHER PUBLICATIONS

Written Opinion for International Application PCT/US01/12066, filed Apr. 11, 2001, Mailed Apr. 10, 2002 (4 pgs).

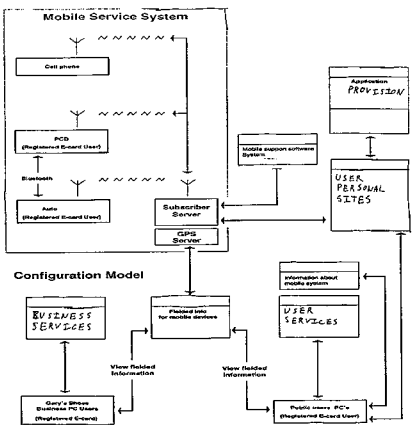
(Continued)

Primary Examiner—Lee Nguyen
(74) *Attorney, Agent, or Firm*—Christie, Parker & Hale, LLP

(57) **ABSTRACT**

A GPS publication application server. A mobile location knowledgeable device is in communication with a server. The server provides indications of the device's location to a home page associated with the device. The home page includes information about a user of the device and methods of contacting the user at any particular time. The server is also in communication with a variety of application servers. The application servers push information to the device depending on the device location and preferences listed in the home page of the device.

12 Claims, 6 Drawing Sheets



U.S. PATENT DOCUMENTS

5,420,592	A	5/1995	Johnson	
5,432,841	A	7/1995	Rimer	379/59
5,450,329	A	9/1995	Tanner	
5,479,351	A	12/1995	Woo et al.	
5,479,482	A	12/1995	Grimes	
5,497,339	A	3/1996	Bernard	
5,517,193	A	5/1996	Allison et al.	
5,519,403	A	5/1996	Bickley et al.	
5,528,248	A	6/1996	Steiner	
5,555,286	A	9/1996	Tendler	
5,559,520	A	9/1996	Barzegar et al.	
5,559,707	A	9/1996	DeLorme et al.	
5,572,204	A	11/1996	Timm et al.	
5,579,535	A	11/1996	Orlen et al.	
5,625,668	A	4/1997	Loomis et al.	
5,625,884	A	4/1997	Gitlin et al.	
5,627,549	A	5/1997	Park	
5,630,068	A	5/1997	Vela et al.	
5,636,269	A	6/1997	Eisdorfer	
5,642,285	A	6/1997	Woo et al.	
5,647,002	A	7/1997	Brunson	
5,648,763	A	7/1997	Long	
5,648,769	A	7/1997	Sato et al.	
5,654,886	A	8/1997	Zereski, Jr. et al.	
5,661,652	A	8/1997	Sprague et al.	
5,663,548	A	9/1997	Hayashi et al.	
5,673,039	A	9/1997	Pietzsch et al.	
5,677,837	A	10/1997	Reynolds	
5,680,444	A	10/1997	Reeves	
5,694,514	A	12/1997	Evans et al.	
5,699,056	A	12/1997	Yoshida	
5,712,625	A	1/1998	Murphy	
5,717,748	A	2/1998	Sneed, Jr. et al.	
5,717,749	A	2/1998	Sneed, Jr. et al.	
5,719,936	A	2/1998	Hillenmayer	
5,720,037	A	2/1998	Biliris et al.	
5,724,417	A	3/1998	Bartholomew et al.	
5,727,053	A	3/1998	Sizer, II et al.	
5,731,997	A	3/1998	Manson et al.	
5,742,509	A	4/1998	Goldberg et al.	
5,748,252	A	5/1998	Draves	
5,760,742	A	6/1998	Branch et al.	
5,774,070	A	6/1998	Rendon	
5,774,825	A	6/1998	Reynolds	
5,774,827	A	6/1998	Smith, Jr. et al.	
5,781,150	A	7/1998	Norris	
5,786,789	A	7/1998	Janky	
5,790,974	A	8/1998	Tognazzini	
5,794,174	A	8/1998	Janky et al.	
5,802,492	A	9/1998	DeLorme et al.	
5,819,227	A	10/1998	Obuchi	
5,848,373	A	12/1998	DeLorme et al.	
5,864,305	A	1/1999	Rosenquist	
5,908,464	A	6/1999	Kishigami et al.	
5,919,246	A	7/1999	Waizmann et al.	
5,929,774	A	7/1999	Charlton	
5,938,721	A	8/1999	Dussell et al.	
5,946,626	A	8/1999	Foladare et al.	455/456
5,948,040	A	9/1999	DeLorme et al.	
5,963,956	A	10/1999	Smartt	
5,982,298	A	11/1999	Lappenbusch et al.	
5,999,124	A	12/1999	Sheynblat	
5,999,877	A	12/1999	Takahashi et al.	
6,028,550	A	2/2000	Froeberg et al.	
6,047,327	A	4/2000	Tso et al.	
6,075,874	A	6/2000	Higashikubo et al.	
6,087,965	A	7/2000	Murphy	
6,092,076	A	7/2000	McDonough et al.	
6,107,939	A	8/2000	Sorden	
6,107,944	A	8/2000	Behr et al.	
6,119,066	A	9/2000	Sugiura et al.	
6,122,506	A	9/2000	Lau et al.	
6,124,825	A	9/2000	Eschenbach	
6,127,945	A	10/2000	Mura-Smith	
6,131,066	A	10/2000	Ahrens et al.	
6,134,501	A	10/2000	Oumi	
6,141,610	A	10/2000	Rothert et al.	
6,144,920	A	11/2000	Mikame	
6,147,598	A	11/2000	Murphy et al.	
6,148,261	A	11/2000	Obradovich et al.	
6,163,749	A	12/2000	McDonough et al.	
6,163,753	A	12/2000	Beckmann et al.	
6,166,626	A	12/2000	Janky et al.	
6,169,955	B1	1/2001	Fultz	
6,173,231	B1	1/2001	Chojnacki	
6,184,801	B1	2/2001	Janky	
6,185,427	B1	2/2001	Krasner et al.	
6,188,957	B1	2/2001	Bechtolsheim et al.	
6,192,312	B1	2/2001	Hummelsheim	
6,192,314	B1	2/2001	Khavakh et al.	
6,199,013	B1	3/2001	O'Shea	
6,202,023	B1	3/2001	Hancock et al.	
6,208,934	B1	3/2001	Bechtolsheim et al.	
6,212,392	B1	4/2001	Fitch et al.	
6,212,470	B1	4/2001	Seymour et al.	
6,212,472	B1	4/2001	Nonaka et al.	
6,212,473	B1	4/2001	Stefan et al.	
6,212,550	B1	4/2001	Segur	
6,215,857	B1	4/2001	Kasiviswanathan	
6,215,993	B1	4/2001	Ulveland	
6,219,557	B1	4/2001	Havinis	
6,219,614	B1	4/2001	Uchihaki et al.	
6,219,694	B1	4/2001	Lazaridis et al.	
6,321,158	B1	11/2001	DeLorme et al.	
6,332,127	B1	12/2001	Bandera et al.	
6,360,102	B1 *	3/2002	Havinis et al.	455/457
6,377,810	B1 *	4/2002	Geiger et al.	455/456.2
2002/0068551	A1 *	6/2002	Strunk et al.	455/414

FOREIGN PATENT DOCUMENTS

EP	0 829 704 A2	3/1998
EP	0853287 A2	7/1998
JP	9-231263	9/1997
JP	113072	1/1999
WO	WO 99/56144	11/1999
WO	WO 00/03364	1/2000
WO	WO 00/04730	1/2000

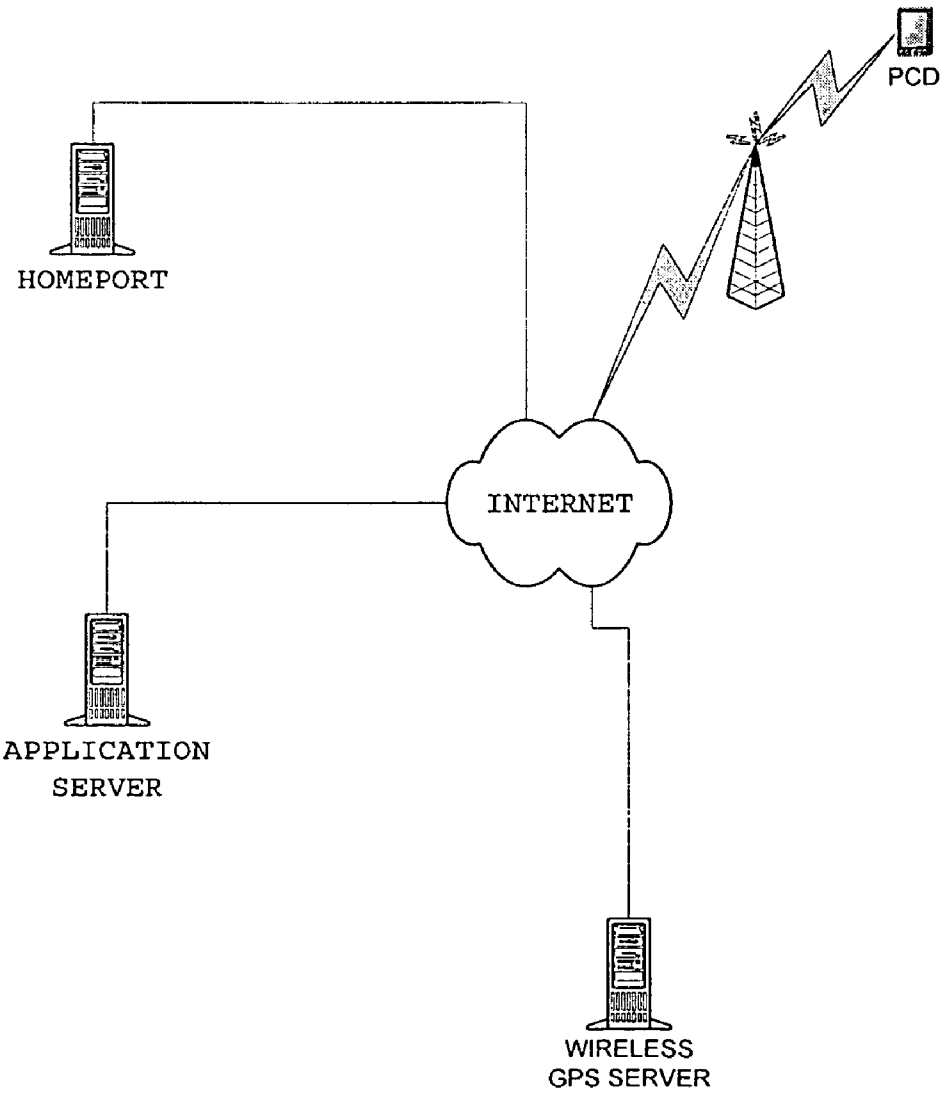
OTHER PUBLICATIONS

International Search Report of PCT/US01/12066 mailed Aug. 8, 2001 (4 pages).
Supplementary European Search Report for European Application Publication No. 1279305, published Jan. 29, 2003, Search Report Dated Mar. 21, 2003 (3 pages).
Alcatel web pages, Alcatel, Nov. 24, 1998 (58 pages).
Giga Information Group, Inc. web pages, Giga Information Group, Inc. Nov. 24, 1998 (4 pages).
Spyglass web pages, Spyglass, Nov. 24, 1998 (58 pages).
Think Thin, PC Magazine, Dec. 1, 1998 (p. 9).
McDonald, Keith D., "Course 122—GPS Fundamentals & Applications", Navtech Seminars & GPS Supply, Inc., Catamaran Resort Hotel, San Diego, CA, Mar. 22-23, 1999 (336 sheets).
Kelley, Tom, "Traffic Control Traffic Data, Unplugged", ITS World, Jul./Aug. 2000 (pp. 28-30).
Bishop, Richard, "The Final Stop Remember IVHS?", ITS World Jul./Aug. 2000 (pp. 14-15).
Metricom in the News, web pages, Metricom, Inc., Nov. 24, 1998 (8 pages).
Demmler, "Another car navigation system," Automotive Engineering, Jun. 1996, pp. 87,89, 2 pages.
Jewett, "Toyota offers navigation system as U.S. option," Automotive News, Nov. 18, 1996, p. 16, 2 pages.

Yamaguchi, "Honda in-car navigation system for the U.S.," Automotive Engineering, Jun. 1996, pp. 82-84, 3 pages.
Heuchert, "Eyes Forward: An ergonomic solution to driver information overload," Automotive Engineering, Sep. 1996, pp. 27-31, 5 pages.
Noriyuki, "Just Think of It as a Big Eye in the Sky . . . Watching," Los Angeles Times Section E, pp. 1, 8, Apr. 27, 1997, 3 pages.
"Trimble Demonstrates Trimconnect," Flying, Jul. 1997, p. 51, 1 page.
Steve Dye with Dr. Frank Baylin, The GPS Manual Principles and Applications, "Land Navigation Markets—Overview", Feb. 1997, ISBN:0-917893-29-8, 23 pages.

* cited by examiner

FIG. 1


PCD
HOMEPORT
INTERNET
APPLICATION SERVER
WIRELESS GPS SERVER

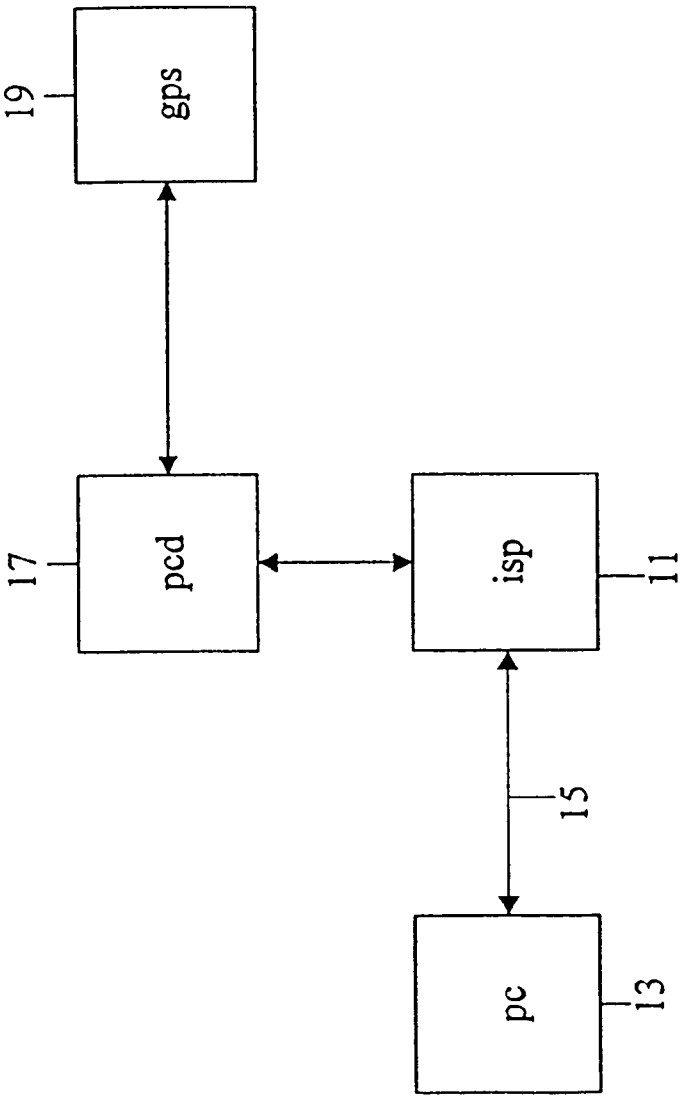
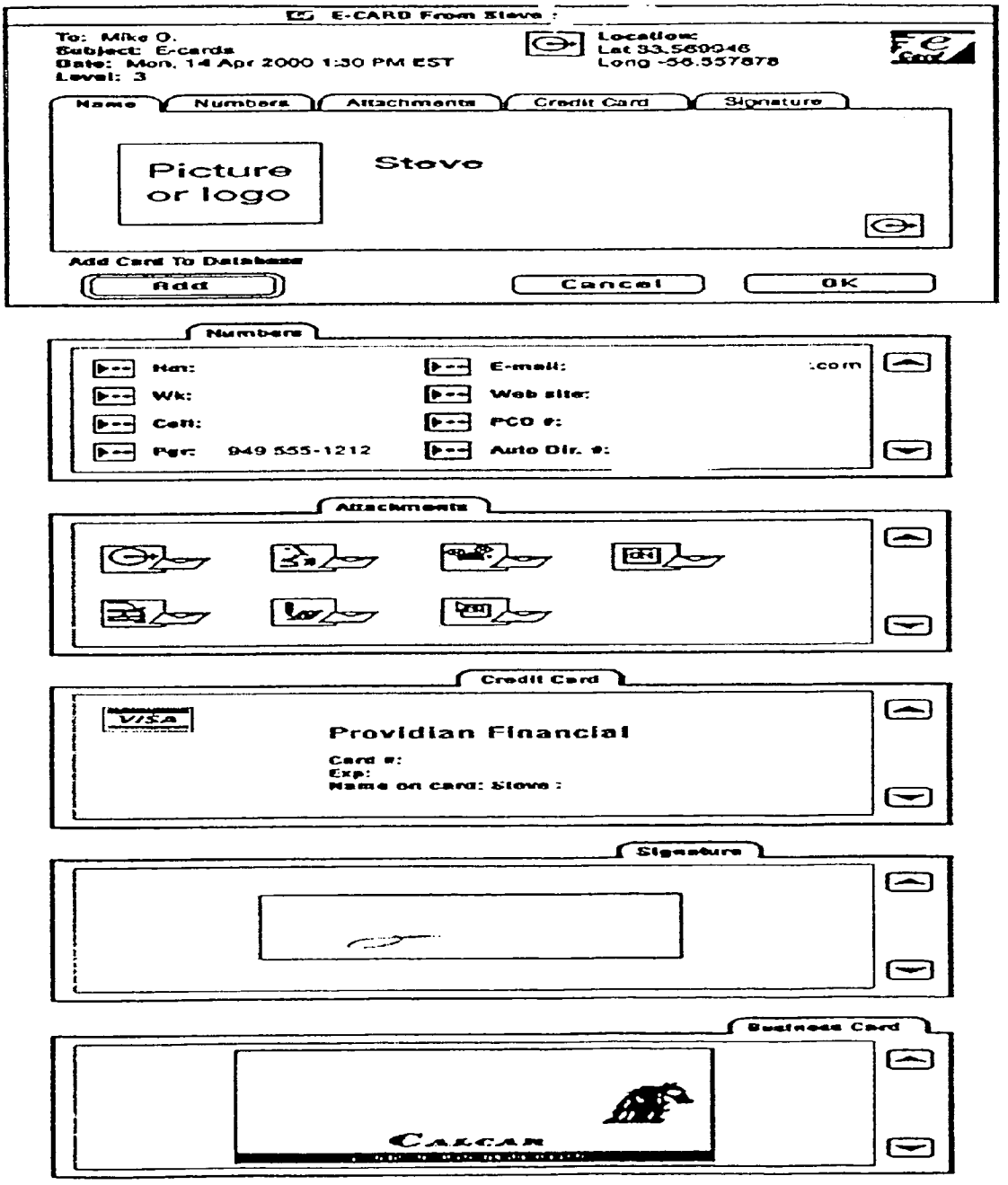


FIGURE 1A

FIG. 2


E-CARD From Steve :
To: Mike O.
Subject: E-cards
Date: Mon, 14 Apr 2000 1:30 PM EST
Level: 3
Location:
Lat 33.560946
Long -56.557878
Name
Numbers
Attachments
Credit Card
Signature
Picture or logo
Steve
Add Card To Database
Add
Cancel
OK
Numbers
Hm:
Wk:
Cell:
Pgr: 949 555-1212
E-mail:
Web site:
PCO #:
Auto Dir. #:
.com
Attachments
Credit Card
VISA
Providian Financial
Card #:
Exp:
Name on card: Steve :
Signature
Business Card
CALGAR

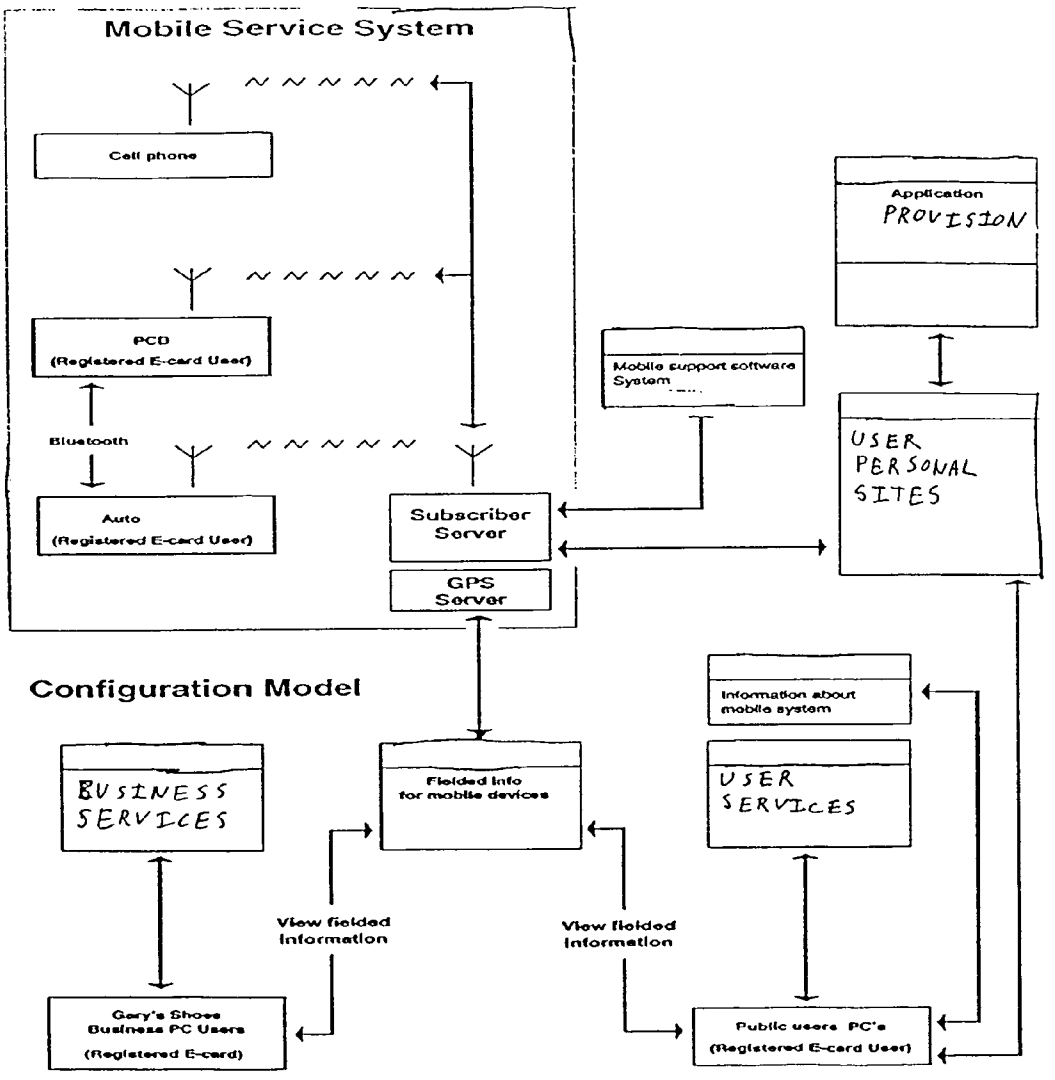

Mobile Service System
Cell phone
PCD
(Registered E-card User)
Bluetooth
Auto
(Registered E-card User)
Subscriber Server
GPS Server
Application
PROVISION
Mobile support software System
USER PERSONAL SITES
Configuration Model
Information about mobile system
BUSINESS SERVICES
Fielded info for mobile devices
USER SERVICES
View fielded information
View fielded information
Gary's Shoes Business PC Users
(Registered E-card)
Public users PC's
(Registered E-card User)

FIG 3

FIG 4

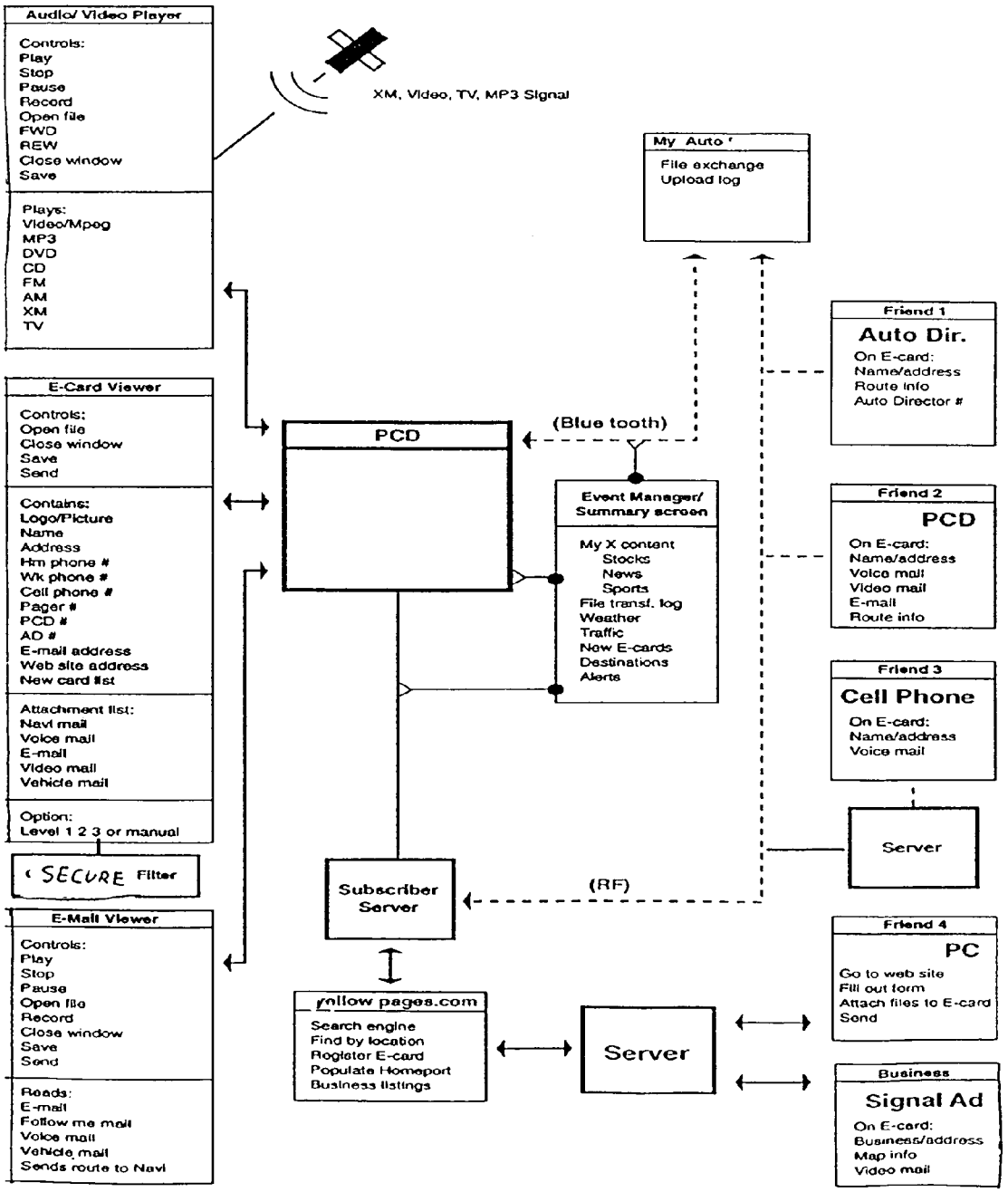
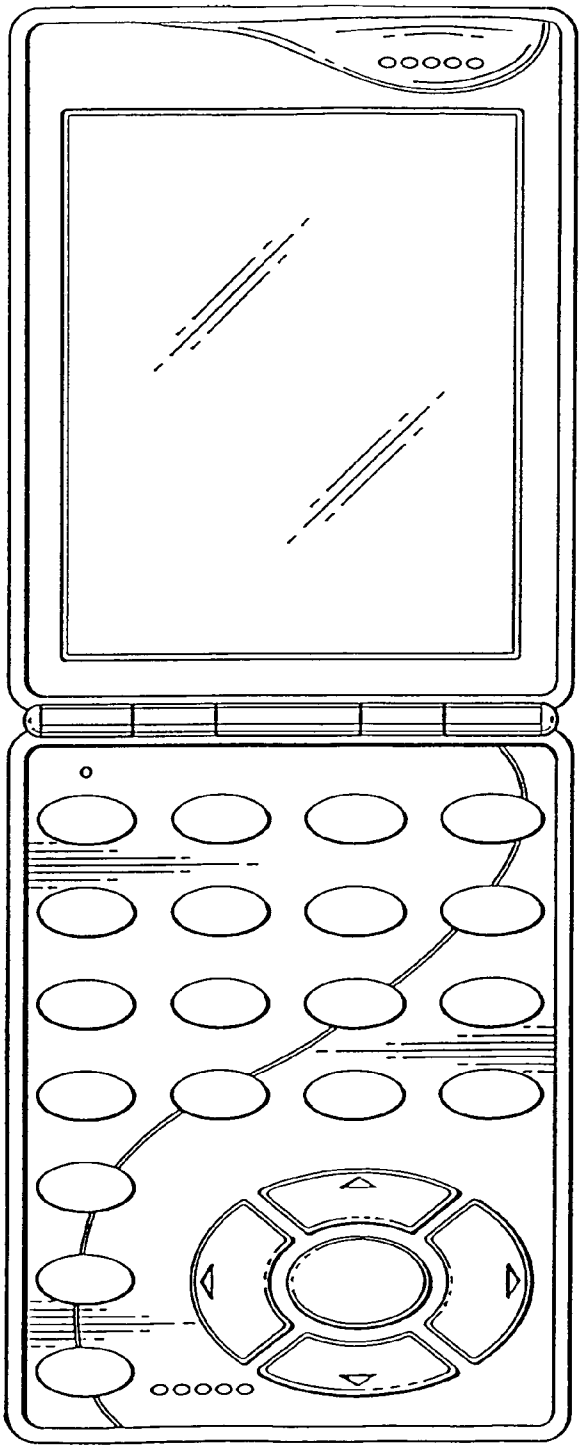

Audio/ Video Player
Controls:
Play
Stop
Pause
Record
Open file
FWD
REW
Close window
Save
Plays:
Video/Mpeg
MP3
DVD
CD
FM
AM
XM
TV
XM, Video, TV, MP3 Signal
My Auto '
File exchange
Upload log
Friend 1
Auto Dir.
On E-card:
Name/address
Route info
Auto Director #
E-Card Viewer
Controls:
Open file
Close window
Save
Send
Contains:
Logo/Picture
Name
Address
Hm phone #
Wk phone #
Cell phone #
Pager #
PCD #
AD #
E-mail address
Web site address
New card list
Attachment list:
Navi mail
Voice mail
E-mail
Video mail
Vehicle mail
Option:
Level 1 2 3 or manual
SECURE Filter
PCD
(Blue tooth)
Event Manager/
Summary screen
My X content
Stocks
News
Sports
File transf. log
Weather
Traffic
New E-cards
Destinations
Alerts
Friend 2
PCD
On E-card:
Name/address
Voice mail
Video mail
E-mail
Route info
Friend 3
Cell Phone
On E-card:
Name/address
Voice mail
Server
Subscriber
Server
(RF)
E-Mail Viewer
Controls:
Play
Stop
Pause
Open file
Record
Close window
Save
Send
Reads:
E-mail
Follow me mail
Voice mail
Vehicle mail
Sends route to Navi
Follow pages.com
Search engine
Find by location
Register E-card
Populate Homeport
Business listings
Server
Friend 4
PC
Go to web site
Fill out form
Attach files to E-card
Send
Business
Signal Ad
On E-card:
Business/address
Map info
Video mail

FIG. 5



GPS PUBLICATION APPLICATION SERVER

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application claims the benefit of the filing date of U.S. Provisional Patent Application No. 60/196,575, filed Apr. 11, 2000, the disclosure of which is incorporated by reference.

BACKGROUND

The present invention relates generally to user mobile information systems, and more specifically to location identifiable user mobile communication systems.

The use of mobile communication units, such as cellular telephones, is becoming increasingly common. Cellular telephones, for example, allow individuals to communicate with others when those individuals are away from a base of operations, on the go, or at locations having insufficient or inconvenient land telephone lines. In addition, communication systems such as cellular telephones provide a simple and easy way to communicate with individuals carrying cellular telephones no matter where they are, so long as one knows the appropriate telephone number.

At times, however, knowledge of the location of an individual is important. For example, some communication methods, such as facsimile, generally are not mobile in nature. For example, often to send a facsimile one needs to know the location and number of a fixed fax machine to which a fax may be sent. Similarly, it is often difficult to courier packages to a person whose location is not known.

However, in many instances it is not feasible to contact an individual, even one who has a cellular telephone, and ask the individual their location. The individual may not know their location or other particular details such as street address or facsimile number necessary to send the individual items. Moreover, some individuals may jealously guard the number of their cellular telephone, so that in many instances it is not possible to simply call a person on their cellular telephone to determine their location. Further, in some instances people are unable to answer their cellular telephone to provide their location information to those who know their telephone number.

Thus, the use of cellular telephones and generally mobile communication systems, provides for the increased transmission of information between individuals, particularly those on the move. However, the communication of information, particularly other than a voice information, is not fully utilized using such communication systems.

In addition, individuals on the move often have unique information requirements, particularly with respect to information concerning places near their location. Such needs are also not fully met by mobile communication systems, even though such information is generally available on communication networks. For example, server computers reachable through the internet are commonly provide nearly boundless information, with much of the information having geographical relevance. Such information is often largely unavailable to users of mobile communication systems, and moreover is not particularly adapted to suit the needs of users of mobile communication systems.

SUMMARY OF THE INVENTION

In one embodiment of the present invention a GPS server periodically requests information from a mobile device. The mobile device includes GPS receiver circuitry to receive GPS signals. The GPS receiver makes use of information provided by a GPS reference server and error correction processing performed by the GPS reference server to determine its location. Upon probing by the GPS server the mobile device provides the GPS server the present position of the mobile device, as well as additional information.

Techniques for communicating GPS related information to wireless devices, particularly information allowing a wireless communication device to quickly obtain its location are known. In the present invention, certain user preferences are communicated to Internet coupled computer devices.

In this new system and method certain preferences are sent from a wireless device to a GPS server and then forwarded on to a separate application server for storing in the users personal home page location, or user-specific storage space allows the user to populate their own database and communicate certain information from that database to other users that were enabled to receive the populated information.

Work groups, community groups and other would be a recipient of this populated database system, thereby allowing dynamic data exchange between preidentified parties. Moreover, different users may have different specific applications that take advantage of this population technique.

Examples include advertising information provided to a user's device once the user's travel pattern is established and personal preferences are considered. Call ID system could be updated and other users would be able to communicate with the user upon receipt of their requests. Using this system the user may simply send visited locations as determined by the GPS server to the users home page for storage and for populating a user's database. Acting on timely requests the GPS server modifies the user's preferences upon probing the user for the GPS data and contact information.

At any time the user could contact the home page for review of stored information and to modify the status of users who subscribe to the user's home page.

This new publishing and subscribing system puts increases storage and calculation tasks on an application server to sort out and serve up to the user upon a request. The PCD device uses less battery power and is not required to perform task beyond its normal operations and changing the user's preferences for the publishing system. The user may request a complete review of their dynamic data upon contacting their own home page. Caller ID systems thereafter route the request for contact to the user's home page and then be given choices for going forward. The user can deny any party access upon sending data along with the GPS probe made by the GPS server. This system does not require the user to make further contact when changing their preferences.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1**A is a block diagram of a system in accordance with aspects of the present invention.

FIG. **1** is a further block diagram of a system in accordance with aspects of the present invention.

FIG. **2** illustrates an e-card in accordance with aspects of the present invention.

FIG. **3** illustrates a block diagram of interconnections in accordance with the present invention.

FIG. **4** is a further block diagram of interconnections in accordance with aspects of the present invention.

FIG. **5** illustrates a PCD.

DETAILED DESCRIPTION

FIG. **1**A illustrates a block diagram of a system in accordance with aspects of the present invention. An Internet service provider (ISP) **11** is linked to a user personal computer **13** via telephone lines **15**. In actuality, one or more computer units may be interdisposed between the PC and the server, with the server being a node on the Internet. The server is also connected via communication link to a personal computer device **17**. One embodiment of the personal computer device is illustrated in FIG. **5** The personal computer device may be a PCD of the type disclosed in U.S. patent application Ser. No. 08/879,955, now U.S. Pat. No. 6,148,261, the disclosure of which is incorporated herein in its entirety by reference.

The PCD includes a global positioning system (GPS) receiver. Accordingly, the PCD receives signals from GPS satellites **19**. The received signals allow the PCD to determine its latitude and longitude.

The PC, in one embodiment serves as a server. The server includes a database. The database includes information pertaining to a variety of topics. More specifically, in one embodiment the database includes information relating to locations. That is, the database includes information regarding specific locations, as well as information pertaining to transportation to and from these locations.

The information in the database is provided by businesses, individuals, and users of PCDs. Thus, the database contains general information provided by businesses, stores, and other commercial entities who wish to make information concerning their business available to others. The database also contains personalized information regarding points of interest and other matters provided by users of PCDs. The database therefore provides a source of information to the users of PCDs, particularly information regarding geographic locations.

FIG. **1** illustrates a further system of the present invention. A personal communication device (PCD) **11** provides GPS receiver and wireless communication capability, particularly cellular telephone communication capability. The PCD may, in one embodiment, be such as disclosed in the aforementioned U.S. patent application Ser. No. 08/879,955, now U.S. Pat. No. 6,148,261. The PCD receives information from a wireless GPS server **13** via cellular telephone communication link. The PCD also provides the wireless GPS server information over the communication link, including information relating to the location of the PCD. In one embodiment the PCD determines its location using, for example, its GPS capability. In another embodiment the PCD contains only a limited amount of GPS receiver processing circuitry. Instead, some of the GPS processing occurs at a wireless GPS server. The wireless GPS server performs, for example, functions such as determining satellites in view of the PCD and the relative Doppler offsets of the satellites. This may be accomplished, for example, using apparatus and methods discussed in U.S. Pat. No. 5,663,734 entitled "GPS Receiver and Method for Processing GPS Signals," the disclosure of which is incorporated by reference. In one embodiment, error correction processing is also performed by the wireless GPS server, thereby further allowing reduced single processing on the part of the PCD.

Accordingly, in one embodiment the PCD provides a wireless GPS server with the present location and an identifying tag indicating the identity of the PCD. The GPS server provides the PCD location and identifier to an application server **15**. The application server is provided the information from the GPS server via the Internet, or in some cases an intranet. The application server upon receipt of the PCD location and identifying tag executes a program which updates a user-specific data space **17**. In one embodiment, the user-specific space is located on the same computer unit as the application server. In other embodiments, the user-specific data space is stored in a separate computer system.

In one application the application server and the wireless GPS server communicate using a hypertext transfer protocol (HTTP) and the wireless GPS server requests that application server execute a CGI script or program making use of the PCD identifier and the PCD location data.

Thereafter the user contacts the application server to obtain information stored in the user-specific storage area. In addition, other individuals may also contact the application server request of the location of the PCD device. This may be accomplished for example, in order to determine how to contact the individual using the PCD.

In one embodiment the user-specific storage space includes information found on an electronic card (e-card). An example of information stored in the e-card is illustrated in FIG. **2**. As illustrated in FIG. **2**, the e-card includes a name, an address such as may be found on physical business cards. The e-card also includes communication information, such as phone numbers for home, work, cell, pager, and PCD, and automobile. Further, the numbers include a web site location and an e-mail address. The card may also include attachments, which is particularly useful when a user is transmitting e-cards to another person. The e-card additionally contains credit card information. The credit card information, along with a signature also available on the e-card, allows the e-card to be used as a payment transfer mechanism. Further, the e-card includes the current location of the individual associated with the e-card.

In addition, the user-specific space is populated with information useful to the particular user. This may be done in the manner described in U.S. patent application Ser. No. 09/126,936 the disclosure of which is incorporated by reference.

In operation, in one embodiment the GPS server periodically transmits a request for, or probes, the location of a PCD. The PCD responds to the probe by providing position information to the GPS server. The GPS server provides the application server an indication of the PCD and an indication of the location of the PCD. The application server updates the user-specific space with the location of the PCD, or provides the location information to another computer system which performs the update.

The user of the PCD may also contact the application server, or other computer maintaining the PCD user-specific space, to review and modify data in the user-specific space. The user may also provide varying levels of access to data in the user-specific space, or the e-card, to both persons known and unknown to the user.

In one embodiment the GPS Server performs many of the functions of the system. Thus, in one embodiment the GPS Server performs probes of PCDs and receives preference updates from users, including contact phone numbers for the user. The GPS server sends updated user information to the application server which stores the information in the user-specific space, which in one embodiment is similar to an individual home page, which may be commonly found on the internet. The user calls a number associated with the GPS server to modify or review status or make additional requests and changes with respect to the user-specific space, and subscribers and parties requesting location and contact information on user are given information, which may vary

by the requester. The user makes the determination as to the access privileges provided requester, generally prior to their request.

The user of the user-specific space provides many benefits, including by providing a location for information concerning the individual. For example, in some embodiments the user-specific space includes tagged movie files, medical files, credit information attached to the contact card. In further embodiments the information may include smart caller ID, phone number calling ID, call forwarding techniques, Navigation information, navigation address books, navigation bookmarks, personal address books, contact manager software, schedule directors, e-mail, fax documents, voice mail are combined on the user's home page for easy access by the user/publisher. The user can arrange specific techniques for contacting him or his dynamic data from specific authorized subscribers.

The user-specific storage space therefore provides for storage and retrieval of e-cards. In addition, the space stores complete navigation information, maps, address books, persona files, navigation bookmarks, advertising bookmarks, smart contact bookmarks all GPS tagged, as well as providing Smart Contact manager, caller ID, Phone ID, call forwarding, call screening, e-mail system, Mail, Voice mail, dynamic data collection system from GPS server, advertising searching and smart bookmarking, and user schedule manager functions.

E-cards provide electronic card file of the user's personal information and attached movie files, complete attachment system from voice, data, fax e-911 medical, personal, and vehicle data system establishes contact and screening system for subscribers. A user updates the e_card, as well as other information on the space on occasion when contacted by GPS server.

FIG. **3** illustrates a communication flow block diagram between various components of systems in accordance with the present invention. The embodiment in FIG. **3** includes a subscriber server and a GPS server. The subscriber server and GPS server are in communication with various web servers over the Internet, as well as with mobile devices. As illustrated, the mobile devices include a cell phone, a PCD, and an automobile phone. Together, the subscriber server, GPS server, and the mobile devices comprise a mobile service system. The PCD and the automobile telephone system are both coupled to user-specific storage areas which provide additional information.

The GPS server and subscriber server are also coupled to numerous web servers over the Internet. For example, the subscriber server is coupled to a mobile support software system. The mobile support software system provides application information and programs to the mobile devices by way of the subscriber server as necessary.

The subscriber server is also coupled to a web server containing numerous user-specific storage spaces. The web server is also coupled to an additional application server containing numerous applications for use in configuring user information. The web server, and the user-specific storage space is also coupled to public users over the Internet. Public users may, for example, interrogate the user-specific space to determine the user's location or other information regarding the user. As discussed in U.S. patent application Ser. No. 09/126,936, the disclosure of which is incorporated by reference, security levels may be implemented so as to restrict the number of people who can access various information about the individual. The general public, and specifically business PC users, may also desire to provide information to the users of for example, PCDs or others moving in location. Accordingly, the general public may provide information to a fielded information web server. The fielded information web server makes location-specific information available to the GPS server, and thus the mobile users. This allows the mobile users for example, to interrogate the fielded information web server to determine the location of nearby places of business in which they may have an interest. This interest may be because they intended to visit the business, are due to a sudden change in circumstance which makes the mobile user desirous of visiting the business.

FIG. **4** further illustrates communication and function flow for a PCD. As illustrated, the PCD is in communication with an automobile user and the PCD is also in communication with the subscriber server. Communication with the subscriber server allows the PCD to obtain information regarding businesses, for example.

In accordance with aspects the present invention, the central computer system also maintains information in a database allowing individual users to be easily located both physically and in terms of their electronic communication locations. The central computer system maintains a database of individuals and an Internet address linked to each individual. The Internet address linked to each individual need not be a unique address, but instead many individuals may make use of a single computer indicated by the Internet address in the Internet address field. For example, for many cases the central computer system may be the computer system identified by the Internet address.

The system also contains a large number of computer systems linked by the Internet, and which are the computer systems pointed to by the address field for the individuals in the Internet address field. Each of these computers form a home site computer system. The responsibility of maintaining the home site computer systems are the responsibility of the individuals.

The home site computer system maintains electronic contact information and geographic location of the individual. The electronic contact information includes home telephone numbers, office telephone numbers, cellular telephone numbers, fax numbers, and e-mail addresses. The geographic location is provided in terms of latitude and longitude, although street addresses or site names can also be provided with the latitude and longitude.

Also linked to each electronic communication identifier in geographic location information is a security level index. In one embodiment, the security level index is a number between one and ten. The individual assigns security level indexes for each item of information. The user also identifies other individuals who may wish to contact the user, and indicates which security index level each such other individual should be provided. Other individuals who are not identified by the user are provided a default security level index. When the home site is contacted by another individual, the other individual provides an identifier, such as the individual's name to the home site. In one embodiment the other individual also provides a password to the home site so that the home site may authenticate the identity of the individual. Based on the identity of the individual, preferably authenticated, the home site determines the other individual's security level index.

The other individual is thereafter only able to obtain information for the other individual's security level index value and those values below the other individual's security level index. For example, a user's general office work number may be assigned a security level index of ten, with the user's direct line phone number provided a security level

index of six. A first other individual with a security index level of seven can only obtain the user's general office number while a second other individual with a security index level of six can also obtain the user's direct line phone number.

The user's geographic location is updated through the PCD. As previously discussed, the PCD can be used to provide e-mails indicative of the user's location in varying manners. When the user's home site computer system is identified as an e-mail address for such updates, the user's home site computer system may track the user over time. In one embodiment of the invention, the user's home site computer system is always provided a copy of any e-mail position updates provided by the PCD.

The present invention therefore provides a location-centric information system. Although the invention has been described with respect to certain specific embodiments, it should be appreciated that the invention may be practiced other than as specifically described.

What is claimed is:

1. A method of providing contact information regarding a user, the method comprising:

allocating a user-specific space in memory accessible over a computer network to a specific user;

associating a mobile communication device with the user;

determining a geographic location of the user by receiving location information provided by a mobile communication device;

storing data indicative of the location of the user in the user-specific space;

receiving, from the user, additional data regarding the user, the additional data being related to the geographic location of the user;

storing the additional data regarding the user in the user-specific space;

receiving from the user an access list of possible requesters of the data and the additional data;

storing the access list of possible requesters of the data and the additional data in the user-specific space; and

providing the data indicative of the location of the user and the additional data regarding the user to possible requesters on the access list.

2. A location relevant server system comprising:

a personal communication device (PCD) comprising a GPS receiver and wireless communication capability;

a GPS server receiving information indicating a geographic location and a unique identifier associated with the PCD, the GPS server providing the PCD location and the unique identifier associated with the PCD to an application server;

the application server configured to execute a program upon receiving the geographic location and the unique identifier information associated with the PCD to update a user specific data space with a current geographic location and the unique identifier associated with the PCD, the application server further configured to allow different users different access to the application sever based on the identity of a user;

wherein the application server is further configured to store information received from and concerning an individual associated with the PCD in the user specific data space, the stored information in the user specific data space including an access list of possible requesters of information concerning the individual associated with the PCD, the access list being received from the individual associated with the PCD; and

wherein the information stored in the user specific data space includes additional information related to the geographic location of the individual associated with the PCD.

3. The system according to claim **2** wherein the application server is further configured to provide the information concerning the individual to a requester.

4. The system according to claim **3** wherein the application server is further configured to modify data in the user specific data space.

5. The system according to claim **4** wherein the data in the user specific data space includes contact information regarding the individual.

6. The system according to claim **5** wherein the contact information regarding the individual includes, phone, fax, and e-mail information.

7. The system according to claim **4** wherein the application server is configured to provide different information concerning the individual to different requesters.

8. The system according to claim **2** wherein the GPS server is further configured to send PCD locations and identifiers to the application server.

9. The system according to claim **8** wherein the user specific data space stores contact information regarding a user associated with the PCD.

10. The system according to claim **9** wherein the contact information regarding the individual includes, phone, fax, and e-mail information.

11. A method of providing contact information regarding a user, the method comprising:

allocating a user-specific space in memory accessible over a computer network to a user;

associating a mobile communication device with the user;

receiving a plurality of user contact information from the user, each user contact information associated with a location of the user;

storing the plurality of user contact information in the user-specific space;

receiving a request from a requestor of information for user contact information;

determining a current location of the user by receiving current location information provided by a mobile communication device;

determining the user contact information associated with the current location of the user; and

providing the user contact information associated with the current location of the user to the requestor of information.

12. The method according to claim **11** further comprising:

receiving from the user an access list of possible requesters of information;

storing the access list in the user-specific space;

determining whether a requestor of information is on the access list upon receiving a request from the requestor of information for user contact information; and

providing the user contact information associated with the current location of the user if the requestor of information is on the access list.

* * * * *

Exhibit B

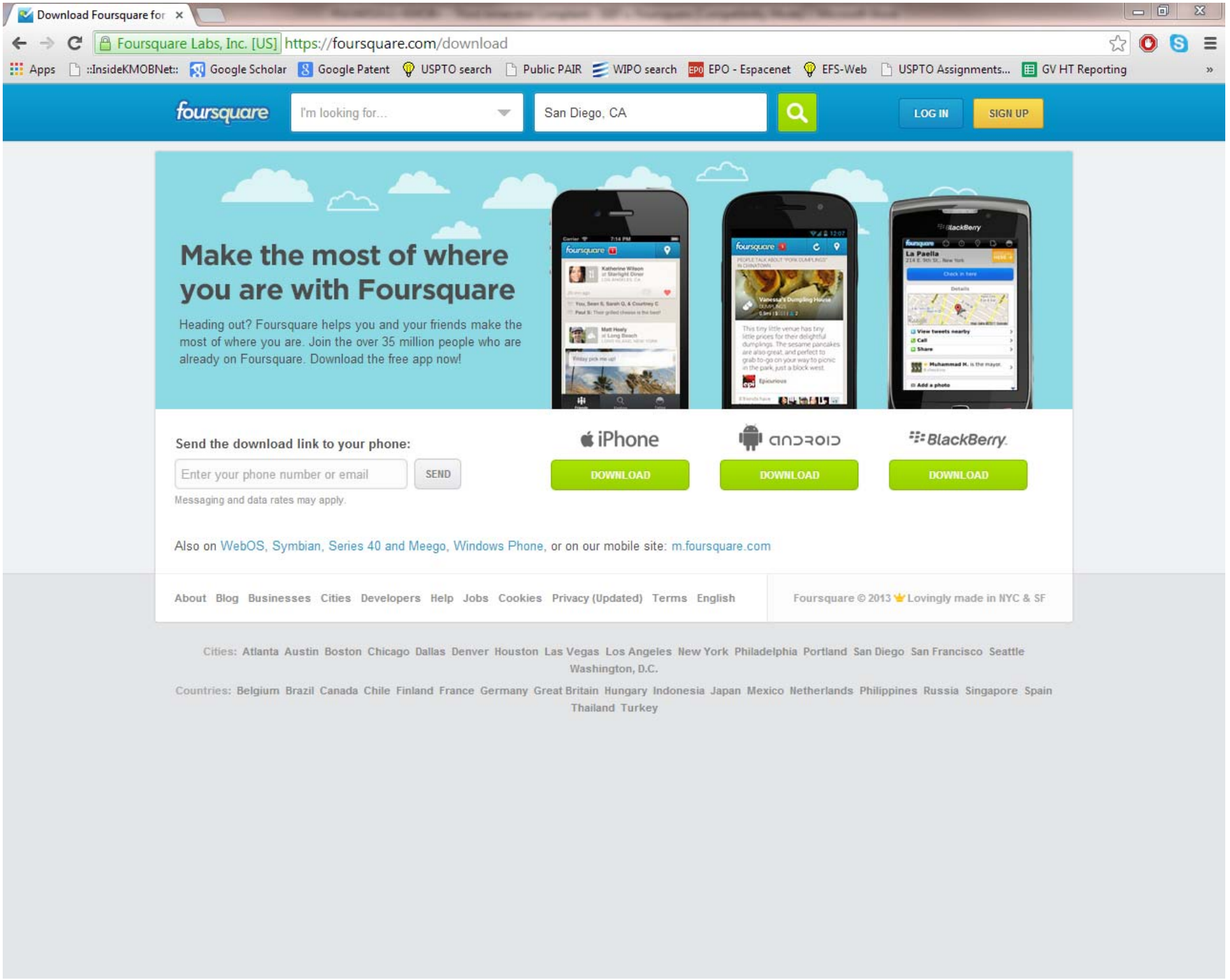

Download Foursquare for
Foursquare Labs, Inc. [US] https://foursquare.com/download
Apps ::InsideKMOBNet:: Google Scholar Google Patent USPTO search Public PAIR WIPO search EPO - Espacenet EFS-Web USPTO Assignments... GV HT Reporting
foursquare
I'm looking for...
San Diego, CA
LOG IN
SIGN UP
Make the most of where you are with Foursquare
Heading out? Foursquare helps you and your friends make the most of where you are. Join the over 35 million people who are already on Foursquare. Download the free app now!
Send the download link to your phone:
Enter your phone number or email
SEND
Messaging and data rates may apply.
iPhone
DOWNLOAD
android
DOWNLOAD
BlackBerry
DOWNLOAD
Also on WebOS, Symbian, Series 40 and Meego, Windows Phone, or on our mobile site: m.foursquare.com
About Blog Businesses Cities Developers Help Jobs Cookies Privacy (Updated) Terms English
Foursquare © 2013 Lovingly made in NYC & SF
Cities: Atlanta Austin Boston Chicago Dallas Denver Houston Las Vegas Los Angeles New York Philadelphia Portland San Diego San Francisco Seattle Washington, D.C.
Countries: Belgium Brazil Canada Chile Finland France Germany Great Britain Hungary Indonesia Japan Mexico Netherlands Philippines Russia Singapore Spain Thailand Turkey

Exhibit C

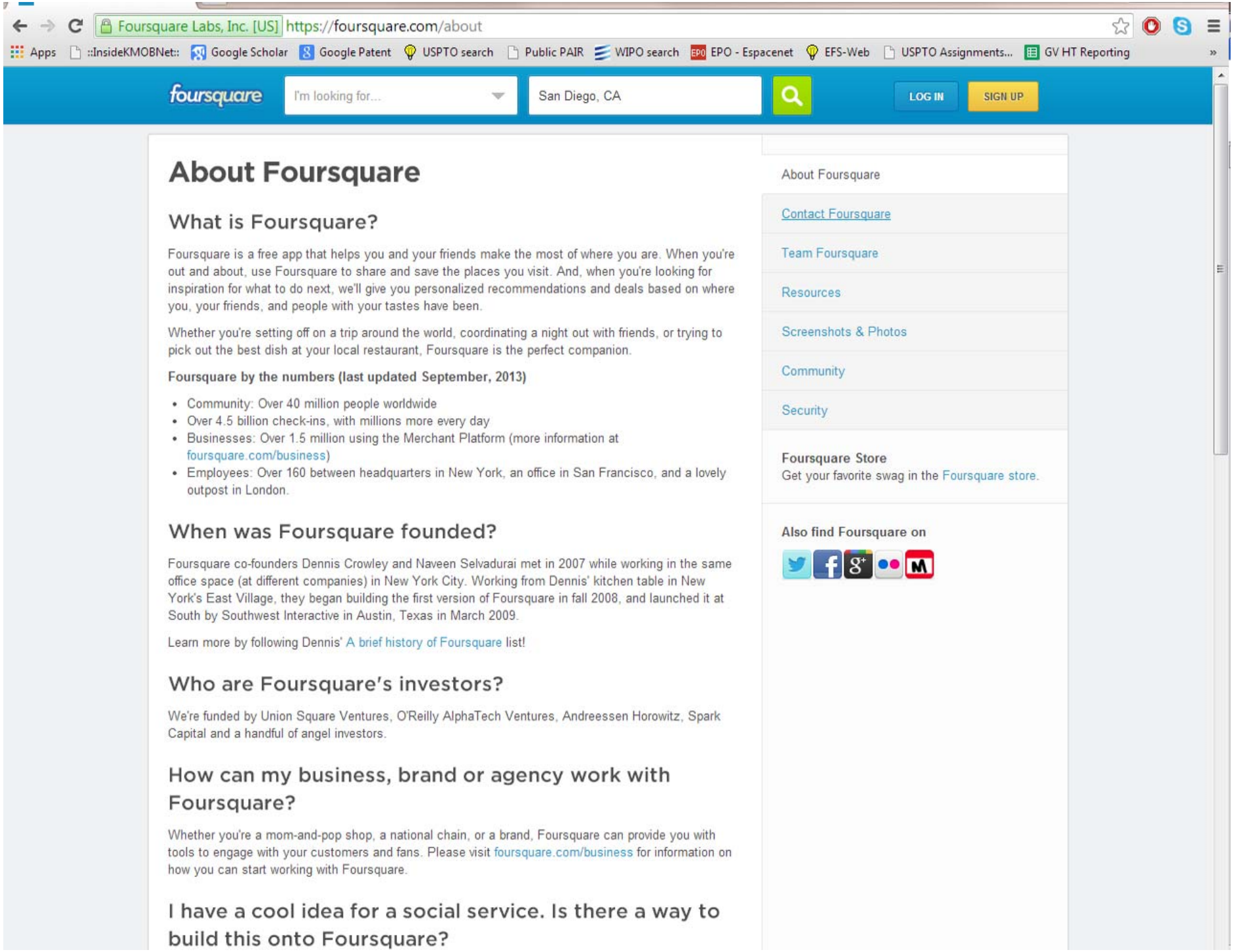


Exhibit C
Page 1

Exhibit D

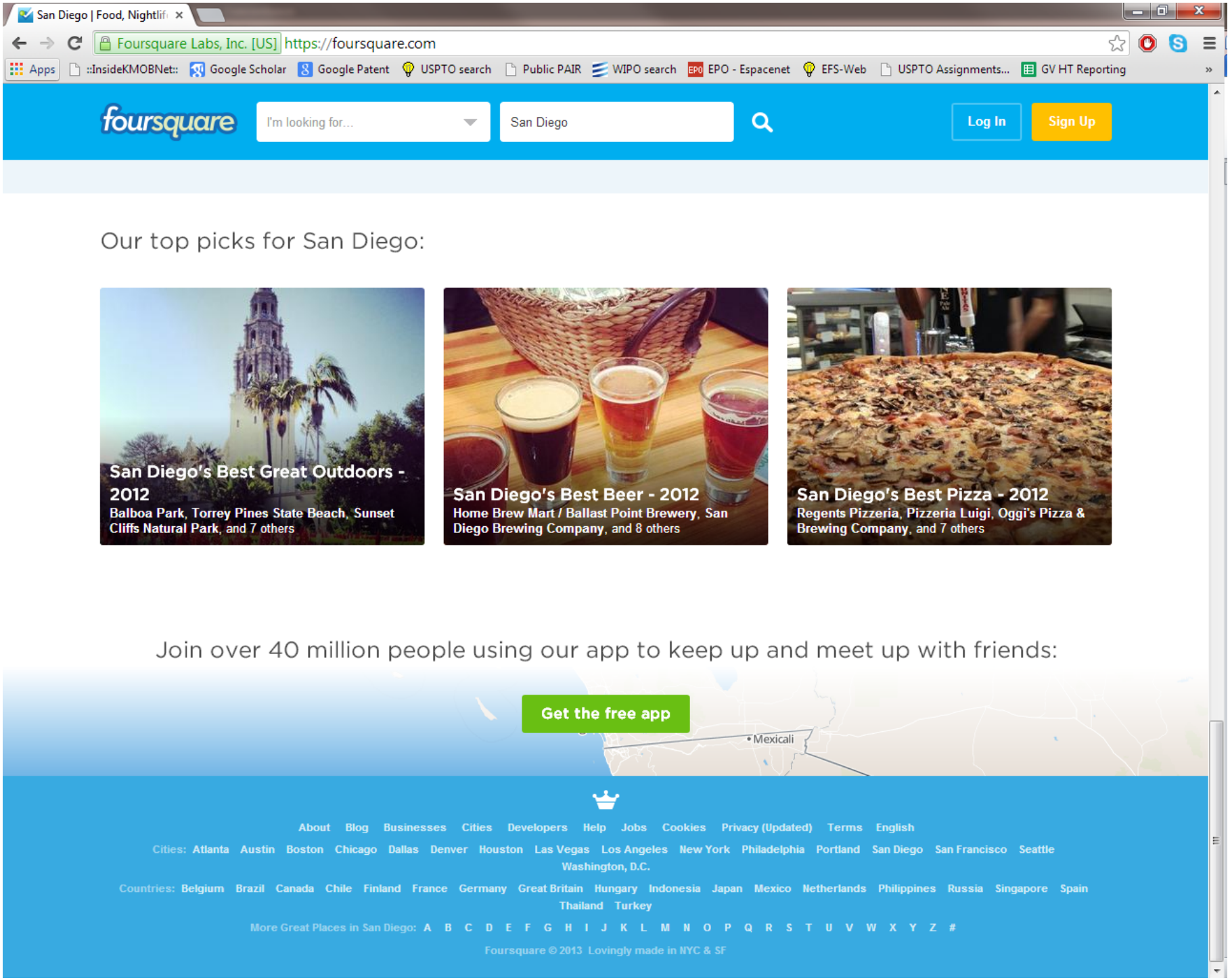

San Diego | Food, Nightlif
Foursquare Labs, Inc. [US] https://foursquare.com
Apps ::InsideKMOBNet:: Google Scholar Google Patent USPTO search Public PAIR WIPO search EPO - Espacenet EFS-Web USPTO Assignments... GV HT Reporting
foursquare
I'm looking for...
San Diego
Log In
Sign Up
Our top picks for San Diego:
San Diego's Best Great Outdoors - 2012
Balboa Park, Torrey Pines State Beach, Sunset Cliffs Natural Park, and 7 others
San Diego's Best Beer - 2012
Home Brew Mart / Ballast Point Brewery, San Diego Brewing Company, and 8 others
San Diego's Best Pizza - 2012
Regents Pizzeria, Pizzeria Luigi, Oggi's Pizza & Brewing Company, and 7 others
Join over 40 million people using our app to keep up and meet up with friends:
Get the free app
Mexicali
About Blog Businesses Cities Developers Help Jobs Cookies Privacy (Updated) Terms English
Cities: Atlanta Austin Boston Chicago Dallas Denver Houston Las Vegas Los Angeles New York Philadelphia Portland San Diego San Francisco Seattle Washington, D.C.
Countries: Belgium Brazil Canada Chile Finland France Germany Great Britain Hungary Indonesia Japan Mexico Netherlands Philippines Russia Singapore Spain Thailand Turkey
More Great Places in San Diego: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #
Foursquare © 2013 Lovingly made in NYC & SF

Exhibit E

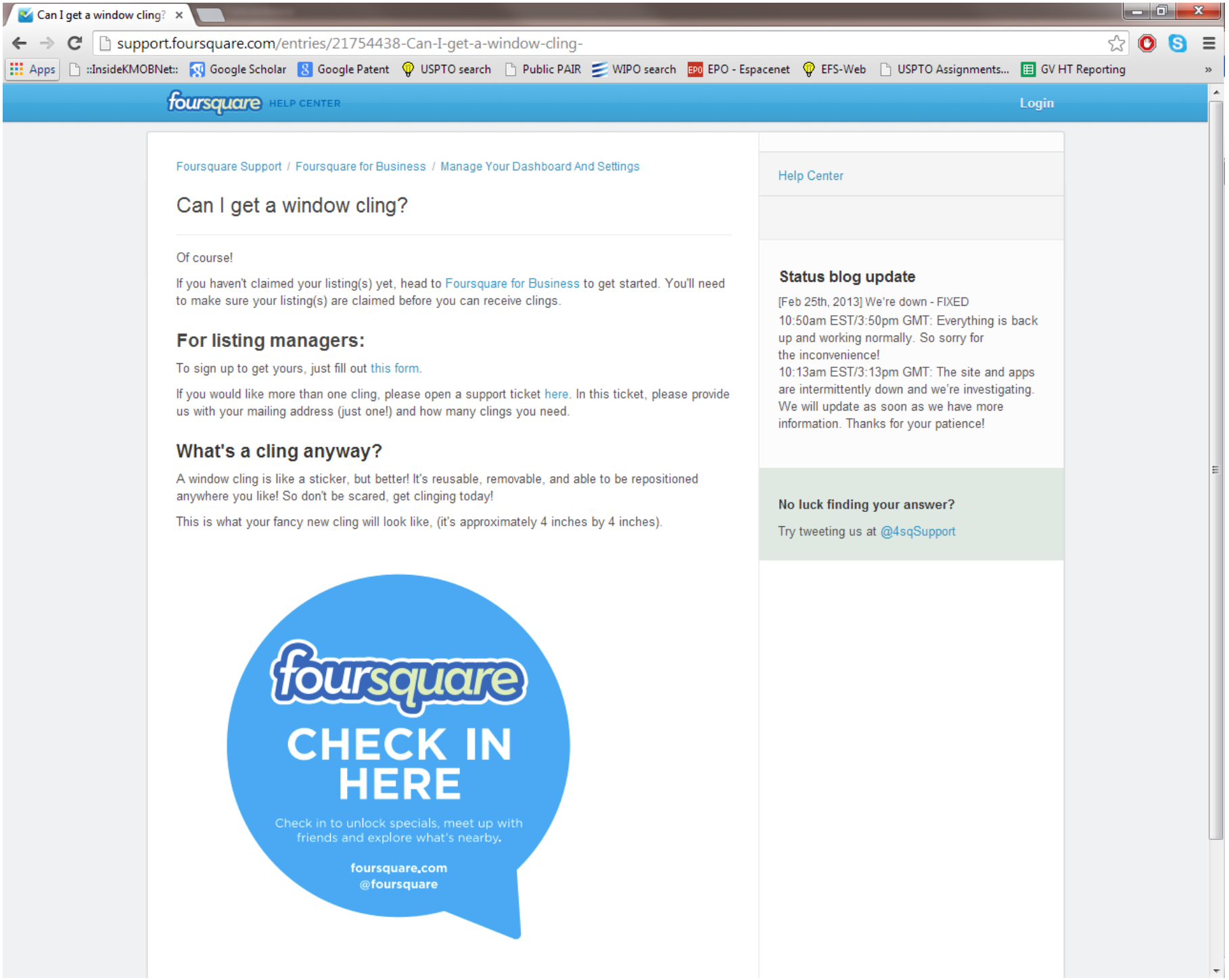

Can I get a window cling?
support.foursquare.com/entries/21754438-Can-I-get-a-window-cling-
Apps
::InsideKMOBNet::
Google Scholar
Google Patent
USPTO search
Public PAIR
WIPO search
EPO - Espacenet
EFS-Web
USPTO Assignments...
GV HT Reporting
foursquare HELP CENTER
Login
Foursquare Support / Foursquare for Business / Manage Your Dashboard And Settings
Can I get a window cling?
Of course!
If you haven't claimed your listing(s) yet, head to Foursquare for Business to get started. You'll need to make sure your listing(s) are claimed before you can receive clings.
For listing managers:
To sign up to get yours, just fill out this form.
If you would like more than one cling, please open a support ticket here. In this ticket, please provide us with your mailing address (just one!) and how many clings you need.
What's a cling anyway?
A window cling is like a sticker, but better! It's reusable, removable, and able to be repositioned anywhere you like! So don't be scared, get clinging today!
This is what your fancy new cling will look like, (it's approximately 4 inches by 4 inches).
foursquare
CHECK IN HERE
Check in to unlock specials, meet up with friends and explore what's nearby.
foursquare.com
@foursquare
Help Center
Status blog update
[Feb 25th, 2013] We're down - FIXED
10:50am EST/3:50pm GMT: Everything is back up and working normally. So sorry for the inconvenience!
10:13am EST/3:13pm GMT: The site and apps are intermittently down and we're investigating. We will update as soon as we have more information. Thanks for your patience!
No luck finding your answer?
Try tweeting us at @4sqSupport

Exhibit F

Foursquare Blog | Foursqu

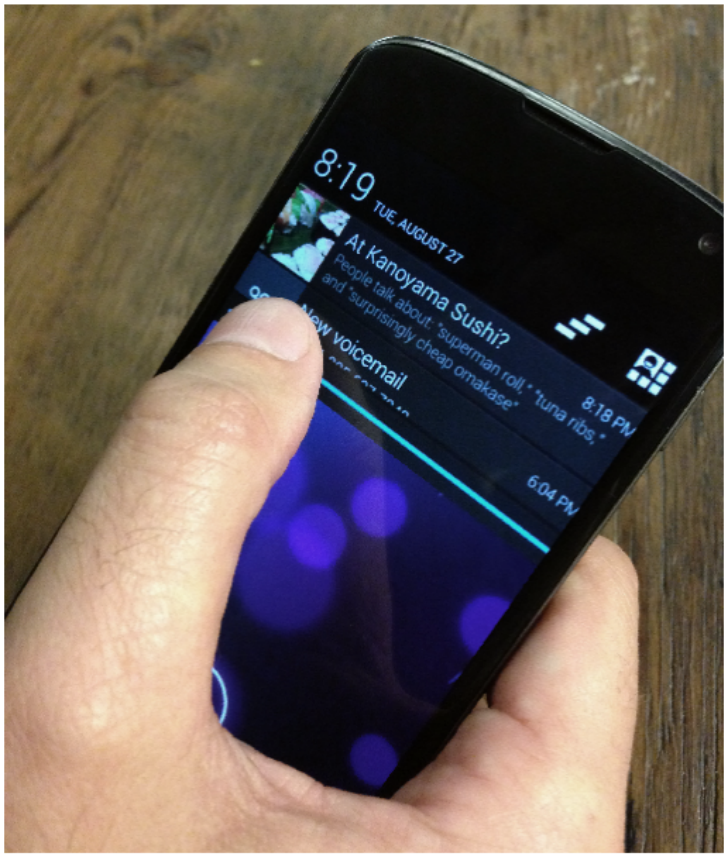
blog.foursquare.com

Apps ::InsideKMOBNet:: Google Scholar Google Patent USPTO search Public PAIR WIPO search EPO - Espacenet EFS-Web USPTO Assignments... GV HT Reporting

Aug 29th

A smarter Foursquare, so you don't miss a thing.

The idea behind Foursquare has always been that, someday, hundreds of millions of people will carry software in their pocket that lets them know when friends are nearby, when places they'll love are around the corner, and whether nearby merchants can help them save money. This is the future we're spending our days building.



When we look at how to build this, we break it down into two main interactions: one between you and your friends, and another between Foursquare and you. For you and your friends, it's about keeping up and meeting up. And between you and Foursquare, it's about what's great nearby.

Part of that Foursquare interaction is straightforward – when you're looking for

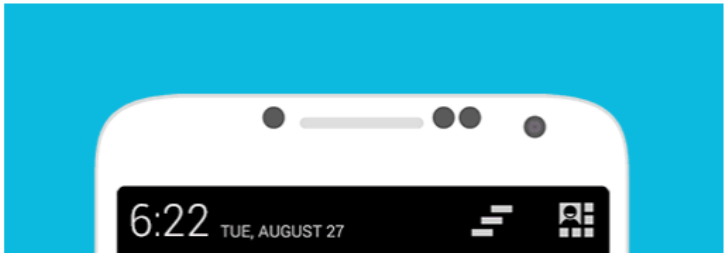
Foursquare Blog | Foursqu ×
blog.foursquare.com
Apps ::InsideKMOBNet:: Google Scholar Google Patent USPTO search Public PAIR WIPO search EPO - Espacenet EFS-Web USPTO Assignments... GV HT Reporting

Part of that Foursquare interaction is straightforward – when you're looking for something like 'gluten-free dinner,' search for it and we'll show you the best places nearby. The other part is more serendipitous – the times when Foursquare surprises you with interesting insights, like the best dish to order when you sit down for dinner, or the three must-see places to go when you arrive in a new part of town. These aren't 'search' moments, but they're a big part of what makes Foursquare special.

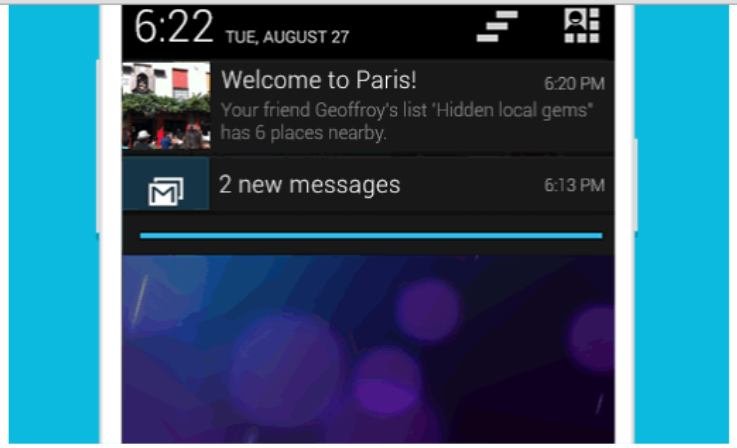
For the last few years, we've been working on this 'special' part, which we're launching today to a few thousand people who use Foursquare on their Android phones. The idea is simple – use your phone's location to give you nearby recommendations. We think of this feature like a sixth sense; proactive recommendations of things you didn't even know you were looking for. In the past, it's been a challenge, mostly because of issues with battery drain and location accuracy.

With our launch today, we've moved past those challenges. With over 4 billion check-ins, our location accuracy has hugely improved. With more than 32 million tips, you've told us about great things worth discovering all around the world. When we tried this two years ago (remember, Radar?) it was about reminding you to check in and letting you know when you were close to places you saved to lists. Today, with everything that Foursquare has learned about the world, it can be proactive recommendations – helping you discover the greatest things nearby without even having to open the app. You still check in when you want to share with friends, and now we may give you great recommendations even if you don't. And while using background location in the past was a battery drain, we've done a ton of tinkering there. Now, you'll barely notice the impact. From our internal tests on a bunch of phones, it only increases drain about 0.7% per hour, or, over the course of a day, the equivalent of about a 20-minute game of Angry Birds.

Today we're excited to start rolling out this smarter Foursquare. Here's how it will work: when you sit down to dinner, we might ping you with the can't-miss dish on the menu (like the screenshot from a sushi bar below). Or when you arrive in a new neighborhood or city, we'll suggest a few places that your friends love (like below, after you've wandered into a new neighborhood). It's like having a ton of local friends stuffed in your pocket wherever you go.



Foursquare Blog | Foursqu ×
blog.foursquare.com
Apps ::InsideKMOBNet:: Google Scholar Google Patent USPTO search Public PAIR WIPO search EPO - Espacenet EFS-Web USPTO Assignments... GV HT Reporting



Because it's powered by billions of check-ins, it's also smart: we're going to ping you when you sit down at a new place where your friend left a tip, not when you're on your daily walk to work. And using this feature doesn't check you in; this isn't for sharing, just for making sure you don't miss great things.

Starting today, we're rolling it out to thousands of Android users. Over the course of the coming months, we're going to be expanding to all Android users, and then iOS (we're taking it a bit slow to make sure we get it just right, but hope to have it to everyone in the next few months). We're so excited to finally have this out in the wild, and for you guys to see what we've been working on the last year-and-a-half and for everyone to see what we think the future of Foursquare looks like.

Not on Foursquare yet? Get started today.

Tweet 383 Like 574

Posted in Blog

Aug 28th

Have a Windows 8 device? Try out the brand new Foursquare to discover great places

Sometimes, when you're deciding where to go for dinner, you start that decision at your desk. That's why we've spent so much time building foursquare.com, and why today, we're releasing a new Foursquare app for those of you with Windows 8 devices. Whether you're looking for the best BBQ in Austin or free wi-fi at the airport, let the new Foursquare app be your guide.