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(54) **DISPLAYING LAYERS OF SEARCH RESULTS ON A MAP**

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G06F 17/30 (2006.01)

(52) **U.S. Cl.**
USPC **707/792**; 715/788; 715/790

(58) **Field of Classification Search**
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,376,516	B2	5/2008	Jones	
7,395,140	B2	7/2008	Christie et al.	
8,015,183	B2 *	9/2011	Frank	707/724
2003/0074358	A1 *	4/2003	Sarbaz et al.	707/10
2004/0225647	A1 *	11/2004	Connelly et al.	707/3
2004/0259573	A1 *	12/2004	Cheng	455/456.3
2005/0278378	A1 *	12/2005	Frank	707/104.1
2006/0271277	A1 *	11/2006	Hu et al.	701/202
2007/0118520	A1 *	5/2007	Bliss et al.	707/5
2008/0059889	A1 *	3/2008	Parker et al.	715/748
2008/0256444	A1 *	10/2008	Wang et al.	715/700
2008/0298342	A1 *	12/2008	Appleton et al.	370/351
2008/0301643	A1 *	12/2008	Appleton et al.	717/124
2009/0282353	A1 *	11/2009	Halbherr et al.	715/769
2010/0057337	A1 *	3/2010	Fuchs	701/200
2010/0057562	A1 *	3/2010	Gabbay	705/14.52
2010/0298050	A1 *	11/2010	Taraschuk et al.	463/31
2011/0106534	A1 *	5/2011	LeBeau et al.	704/235
2011/0161875	A1 *	6/2011	Kankainen	715/810
2012/0022781	A1 *	1/2012	Wilson	701/410

OTHER PUBLICATIONS

Wikipedia. "Geographic Information System." [Retrieved on Jul. 7, 2010] Retrieved from the Internet <URL: http://en.wikipedia.org/w/index.php?title=Geographic_information_syst . . . > 20 pages.
Wikipedia. "Google Maps." [Retrieved on Jul. 7, 2010] Retrieved from the Internet <URL: http://en.wikipedia.org/w/index.php?title=Google_Maps&printable=yes= 17 pages.

* cited by examiner

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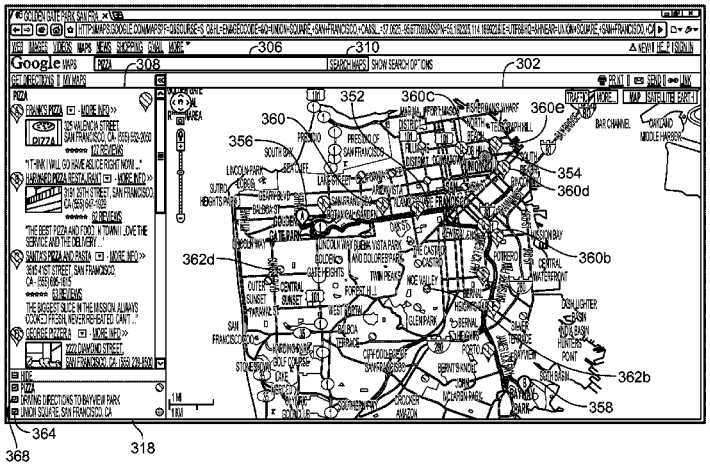
(57) **ABSTRACT**

In general, the subject matter described in this specification can be embodied in methods, systems, and program products. Information that is responsive to each of multiple distinct search queries is received from a server system. The information for each of the search queries identifies a geographical context or includes search results. One or more visual indications of the information for each of the search queries are displayed on a geographical map. A user interface element for each of the search queries is displayed. The user interface element for each of the search queries, when selected by a user, causes removal from the display of the one or more visual indications of the information for the search query that corresponds to the selected user interface element.

20 Claims, 9 Drawing Sheets