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[Continued on next page]

(54) Title: ANALYZING CONSUMER BEHAVIOR USING ELECTRONICALLY-CAPTURED CONSUMER LOCATION DATA

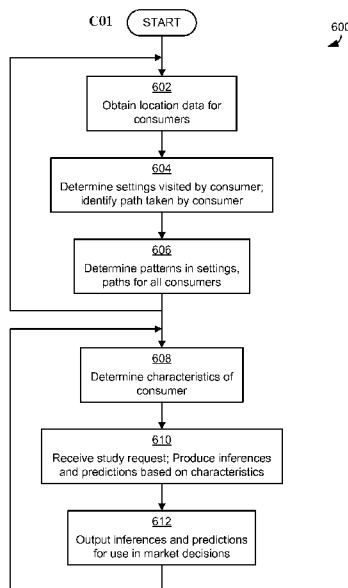


FIG. 6

(57) Abstract: In embodiments, methods and systems for consumer behavior analysis using electronically-captured consumer location data may be provided. The location data may be gathered for one or more consumers. The gathered data may be analyzed to determine behavior patterns or other characteristics of the one or more consumers. Further, inferences or predictions about consumers may be derived based on the characteristics. The inferences and predictions may be the basis of consumer analytics supplied to a business or other entity.



(88) Date of publication of the international search report:
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/053700**A. CLASSIFICATION OF SUBJECT MATTER****G06Q 10/04(2012.01)i, G06Q 30/02(2012.01)i, G06Q 30/06(2012.01)i, G06Q 50/10(2012.01)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)

G06Q 10/04; G06F 15/16; H04M 11/04; G06F 17/00; G06Q 30/00; G06F 17/30; H04Q 7/20; H04W 4/00; G06Q 30/02; G06Q 30/06; G06Q 50/10

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: consumer, location, interval, predict, advertisement, competitor, profile

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category [*]	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002-0111172 A1 (FREDERIK M. DEWOLF et al.) 15 August 2002 See abstract, paragraphs [0006], [0049], [0067], [0072], [0077H0078], [0081]-[0082], [0088], [0096]-[0099], claims 1,7,11-14 and figure 5.	24-32
Y		1-23
Y	US 2007-0298757 A1 (BYUNGK AHN) 27 December 2007 See abstract, claims 9,22-27, and figures 6-7.	1-11
A		12-32
Y	US 2009-0197582 A1 (ROBERT C. LEWIS et al.) 06 August 2009 See abstract, paragraph [0032], claims 1-2,16,37 and figures 1,7-8.	12-23
A		1-11,24-32
A	US 2009-0125396 A1 (JONATHAN OTTO et al.) 14 May 2009 See abstract, claims 1-2,7-8 and figure 2.	1-32
A	US 2008-0125959 A1 (SEAN T. DOHERTY et al.) 29 May 2008 See abstract, claims 1-5 and figures 1,3.	1-32



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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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"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


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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/053700

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002-0111172 AI	15/08/2002	None	
US 2007-0298757 AI	27/12/2007	KR 10-0775769 BI US 7818016 B2	12/11/2007 19/10/2010
US 2009-0197582 AI	06/08/2009	CN 102132588 A EP 2286603 A2 EP 2286603 A4 JP 2011-520304 A KR 10-1161084 BI KR 10-2010-0107518 A WO 2009-099880 A2 WO 2009-099880 A3	20/07/2011 23/02/2011 28/08/2013 14/07/2011 13/07/2012 05/10/2010 13/08/2009 03/06/2011
US 2009-0125396 AI	14/05/2009	US 2003-0083936 AI US 2006-0247973 AI US 2006-0271441 AI US 2008-0208787 AI US 2008-0255941 AI US 2008-0306790 AI US 2008-0313122 AI US 2009-0119168 AI US 2009-0125380 AI US 2009-0132344 AI US 2009-0138342 AI US 2009-0157483 AI US 2009-0164304 AI US 2009-0164391 AI US 2009-0171769 AI US 2009-0182627 AI US 2009-0198561 AI US 2009-0204496 AI US 2009-0276309 AI US 2010-0057654 AI US 2010-0057661 AI US 8041667 B2 US 8224760 B2	01/05/2003 02/11/2006 30/11/2006 28/08/2008 16/10/2008 11/12/2008 18/12/2008 07/05/2009 14/05/2009 21/05/2009 28/05/2009 18/06/2009 25/06/2009 25/06/2009 02/07/2009 16/07/2009 06/08/2009 13/08/2009 05/11/2009 04/03/2010 04/03/2010 18/10/2011 17/07/2012
US 2008-0125959 AI	29/05/2008	CA 2666535 AI US 2014-180583 AI US 8606497 B2 WO 2008-052356 AI	08/05/2008 26/06/2014 10/12/2013 08/05/2008