



(51) International Patent Classification:

G06Q 30/02 (2012.01) G02B 27/01 (2006.01)
G09G 5/00 (2006.01) G06F 17/00 (2006.01)
G06F 3/01 (2006.01)

(21) International Application Number:

PCT/US2013/039419

(22) International Filing Date:

3 May 2013 (03.05.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/464,944 4 May 2012 (04.05.2012) US

(72) Inventors; and

(71) Applicants : PEREZ, Kathryn Stone [US/US]; 8825 113th PL NE, Kirkland, Washington 98033 (US). CLAVIN, John [IE/US]; 2030 13th Ave West, Seattle, Washington 98119 (US). GEISNER, Kevin A. [US/US]; 7209 76th Ave SE, Mercer Island, Washington 98040 (US). LATTA, Stephen G. [US/US]; 4232 34th Avenue W, Seattle, Washington 98199 (US). MOUNT, Brian J. [US/US]; 4122 Midvale Ave N, Seattle, Washington 98103 (US). TOMLIN, Arthur C. [US/US]; 16440 NE 21st PL, Bellevue, Washington 98008 (US). POULOS, Adam G. [US/US]; 22524 NE 98th Pl, Bellevue, Washington 98053 (US).

(74) Agent: VIERRA, Larry E.; Vierra Magen Marcus & DeNiro, LLP, 575 Market Street, Suite 3750, San Francisco, California 94105 (US).

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

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: PRODUCT AUGMENTATION AND ADVERTISING IN SEE THROUGH DISPLAYS

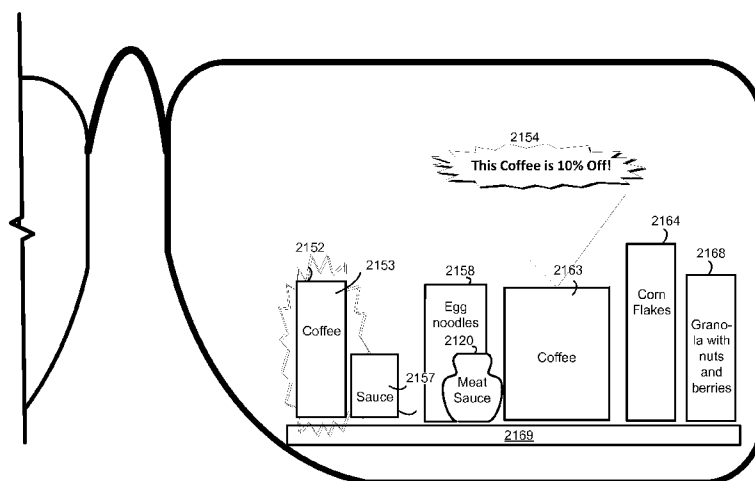


FIG. 21

(57) Abstract: An augmented reality system that provides augmented product and environment information to a wearer of a see through head mounted display. The augmentation information may include advertising, inventory, pricing and other information about products a wearer may be interested in. Interest is determined from wearer actions and a wearer profile. The information may be used to incentivize purchases of real world products by a wearer, or allow the wearer to make better purchasing decisions. The augmentation information may enhance a wearer's shopping experience by allowing the wearer easy access to important product information while the wearer is shopping in a retail establishment. Through virtual rendering, a wearer may be provided with feedback on how an item would appear in a wearer environment, such as the wearer's home.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) **Date of publication of the international search report:**
5 June 2014

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/039419

A. CLASSIFICATION OF SUBJECT MATTER

INV. G06F3/01 G06F17/00 G06Q30/02 G09G5/00 G02B27/01
ADD.

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)

G06F G02B

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

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

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/226535 A1 (KIMCHI GUR [US] ET AL) 9 September 2010 (2010-09-09) the whole document -----	1-10
X	US 2011/213664 A1 (OSTERHOUT RALPH F [US] ET AL) 1 September 2011 (2011-09-01) the whole document -----	1-10
A	US 2001/040590 A1 (ABBOTT KENNETH H [US] ET AL) 15 November 2001 (2001-11-15) paragraph [0028] - paragraph [0056] paragraph [0081] - paragraph [0225] figures 1-20 -----	1-10
A	AU 2011 204 946 B1 (MICROSOFT CORP) 22 December 2011 (2011-12-22) the whole document ----- -/--	1-10



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

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

Date of the actual completion of the international search

9 April 2014

Date of mailing of the international search report

16/04/2014

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Szachowicz, Marta

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/039419

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2011/158478 A1 (YAMADA SHOJI [JP] ET AL) 30 June 2011 (2011-06-30) paragraph [0010] - paragraph [0104] -----	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/039419

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010226535 A1	09-09-2010	NONE	
US 2011213664 A1	01-09-2011	NONE	
US 2001040590 A1	15-11-2001	US 2001040590 A1	15-11-2001
		US 2007022384 A1	25-01-2007
AU 2011204946 B1	22-12-2011	AU 2011204946 B1	22-12-2011
		AU 2012201615 A1	05-04-2012
		US 2013021373 A1	24-01-2013
US 2011158478 A1	30-06-2011	JP 5104679 B2	19-12-2012
		JP 2010067083 A	25-03-2010
		US 2011158478 A1	30-06-2011
		WO 2010029788 A1	18-03-2010