

EXHIBIT A



US009710928B2

(12) **United States Patent**
Atsmon et al.

(10) **Patent No.:** **US 9,710,928 B2**
 (45) **Date of Patent:** ***Jul. 18, 2017**

(54) **SYSTEM AND PROCESS FOR AUTOMATICALLY FINDING OBJECTS OF A SPECIFIC COLOR**

(56) **References Cited**

U.S. PATENT DOCUMENTS

(71) Applicants: **Alon Atsmon**, Ganey-Tikva (IL); **Dan Atsmon**, Rehovot (IL)

7,522,768 B2 4/2009 Bhatti et al.
 8,369,616 B2* 2/2013 Marchesotti G06K 9/4652
 382/162

(72) Inventors: **Alon Atsmon**, Ganey-Tikva (IL); **Dan Atsmon**, Rehovot (IL)

(Continued)

FOREIGN PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

WO WO 2004/027695 4/2004
 WO WO 2009/137830 11/2009

This patent is subject to a terminal disclaimer.

OTHER PUBLICATIONS

(21) Appl. No.: **15/230,433**

Applicant-Initiated Interview Summary Dated Feb. 19, 2016 From the US Patent and Trademark Office Re. U.S. Appl. No. 14/833,099.

(22) Filed: **Aug. 7, 2016**

(Continued)

(65) **Prior Publication Data**

Primary Examiner — Ali Bayat

US 2016/0343149 A1 Nov. 24, 2016

Related U.S. Application Data

(57) **ABSTRACT**

(63) Continuation of application No. 14/833,099, filed on Aug. 23, 2015, now Pat. No. 9,412,182, which is a (Continued)

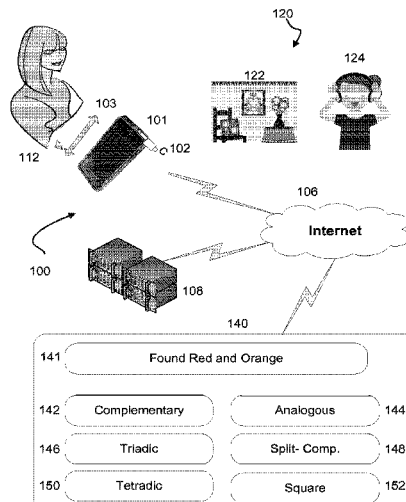
A computer implemented method, system and computer program product for identifying the Main Colors and the matching colors of a visual object, and then viewing on a mobile device select items comprising the matching colors, such as from a merchant's catalogue. A visual object is analyzed for color content, and the results are stored on a system database located on the device or on a remote server. The color analysis of the objects comprise advanced image processing techniques, such as Main Color extraction using color space transformation comprising HSV, RGB and CYMK to map between pixels in the image. The user can subsequently view a display on their mobile identifying the visual object's Main Colors and at least one Harmonic Color; and then select and view all items (i.e. products in a database) comprising one Harmonic Color, and/or all items of a specific type and Harmonic Color.

(51) **Int. Cl.**
G06K 9/00 (2006.01)
G06T 7/40 (2017.01)
 (Continued)

(52) **U.S. Cl.**
 CPC **G06T 7/408** (2013.01); **G06F 17/3025** (2013.01); **G06K 9/4652** (2013.01);
 (Continued)

(58) **Field of Classification Search**
 CPC G06K 9/6201; G06K 9/4652; G06F 17/3025; H04N 1/6058; H04N 1/60;
 (Continued)

20 Claims, 9 Drawing Sheets



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Related U.S. Application Data

- continuation of application No. 14/292,914, filed on Jun. 1, 2014, now Pat. No. 9,117,143, which is a continuation of application No. 13/356,815, filed on Jan. 24, 2012, now Pat. No. 8,744,180.
- (60) Provisional application No. 61/438,993, filed on Feb. 3, 2011, provisional application No. 61/435,358, filed on Jan. 24, 2011.
- (51) **Int. Cl.**
G06Q 10/00 (2012.01)
G06F 17/30 (2006.01)
G06K 9/46 (2006.01)
G06K 9/62 (2006.01)
H04N 5/232 (2006.01)
G06T 7/90 (2017.01)
- (52) **U.S. Cl.**
CPC **G06K 9/6201** (2013.01); **G06Q 10/00** (2013.01); **G06T 7/90** (2017.01); **H04N 5/23229** (2013.01); **G06T 2207/10024** (2013.01)
- (58) **Field of Classification Search**
CPC H04N 1/64; H04N 1/32106; H04N 2201/325; G06T 11/60; G06T 2207/20021; G06T 2207/20144; G06T 2207/30108; G06T 7/0081
- See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

8,744,180 B2	6/2014	Atsmon et al.	
2003/0208754 A1*	11/2003	Sridhar	G06Q 30/02 725/34
2005/0156942 A1	7/2005	Jones	
2008/0046410 A1*	2/2008	Lieb	G06F 17/3025
2009/0024580 A1*	1/2009	Obrador	G06F 17/30256
2009/0202147 A1	8/2009	Sambongi	
2009/0252371 A1	10/2009	Rao	
2009/0290762 A1*	11/2009	Guan	G06K 9/00362 382/107
2013/0022264 A1	1/2013	Atsmon et al.	
2014/0270509 A1	9/2014	Atsmon et al.	
2015/0363945 A1	12/2015	Atsmon et al.	

OTHER PUBLICATIONS

Notice of Allowance Dated Apr. 1, 2016 From the US Patent and Trademark Office Re. U.S. Appl. No. 14/833,099.

Notice of Allowance Dated Apr. 20, 2015 From the US Patent and Trademark Office Re. U.S. Appl. No. 14/292,914.

Notice of Allowance Dated Jan. 31, 2014 From the US Patent and Trademark Office Re. U.S. Appl. No. 13/356,815.

Official Action Dated Dec. 22, 2015 From the US Patent and Trademark Office Re. U.S. Appl. No. 14/833,099.

Official Action Dated Sep. 22, 2014 From the US Patent and Trademark Office Re. U.S. Appl. No. 14/292,914.

Official Action Dated Jul. 31, 2013 From the US Patent and Trademark Office Re. U.S. Appl. No. 13/356,815.

* cited by examiner

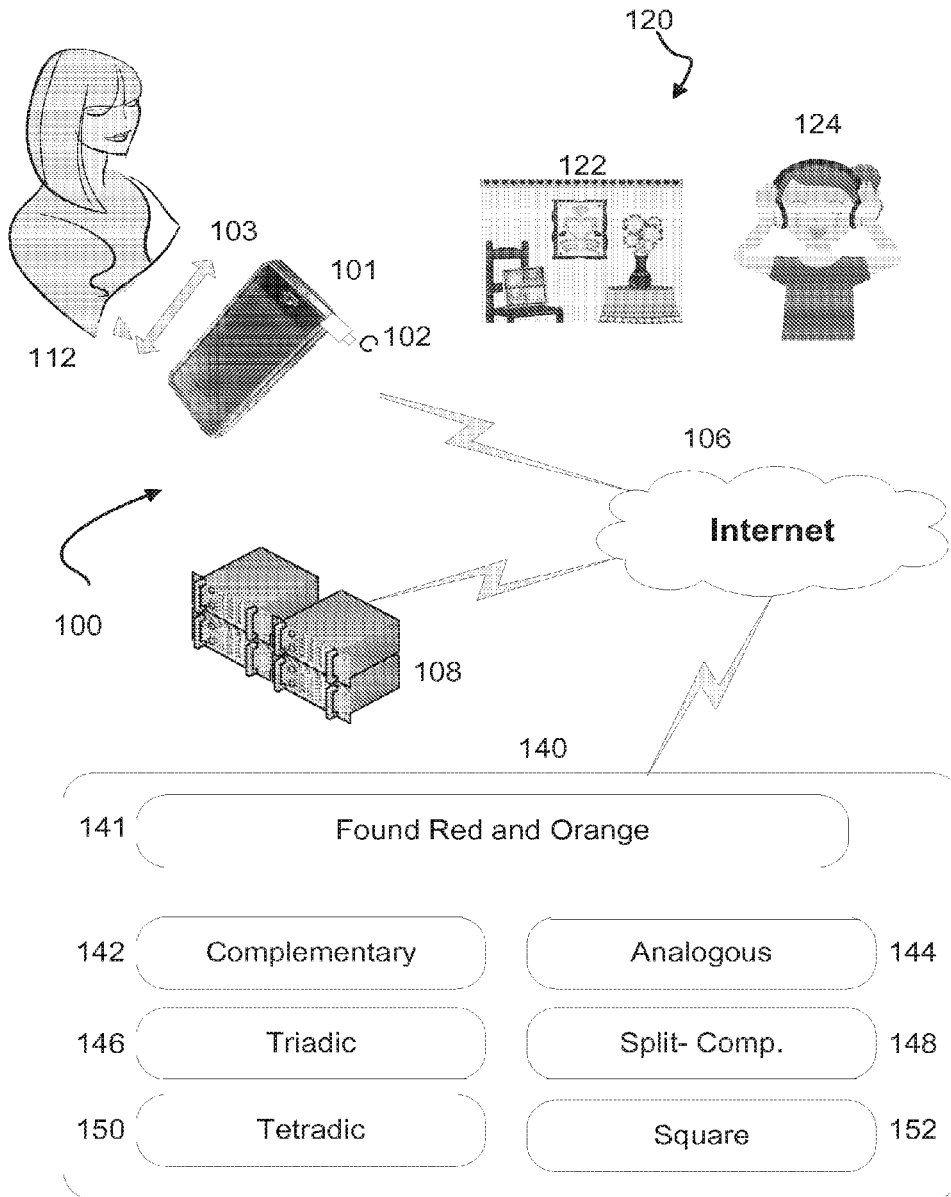


Figure 1

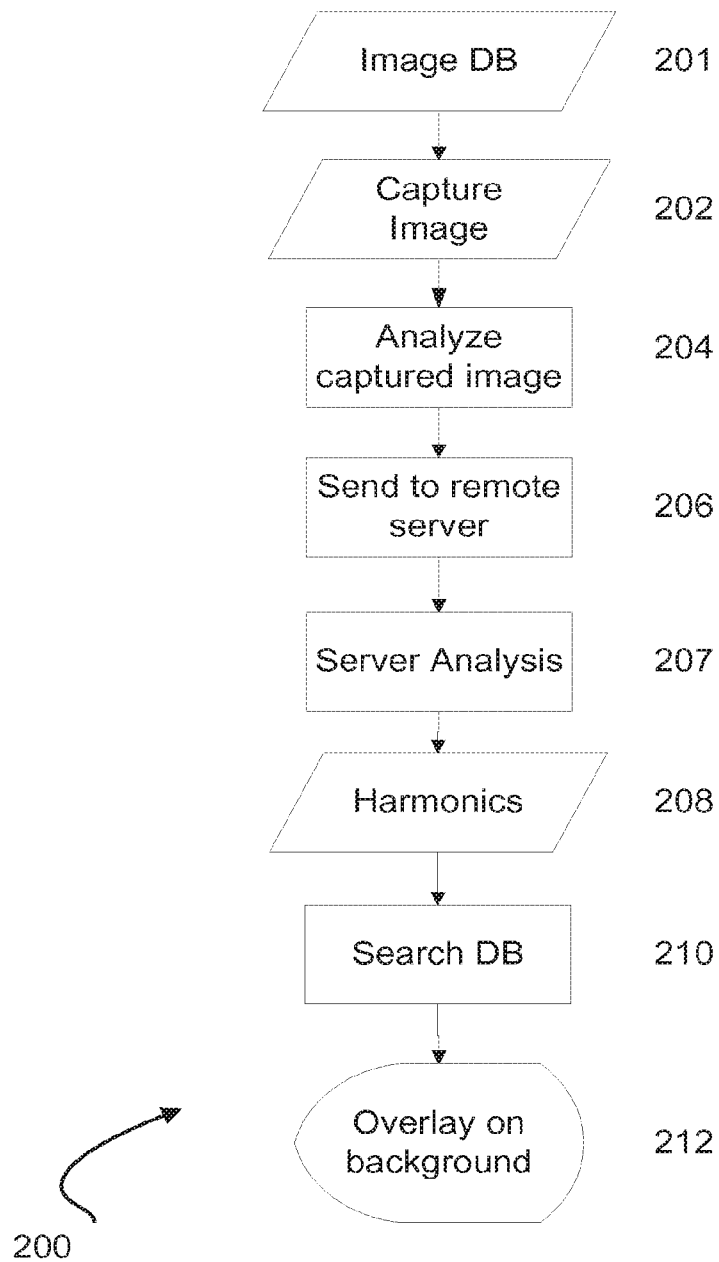


Figure 2

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