

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
23 February 2006 (23.02.2006)

PCT

(10) International Publication Number  
WO 2006/020833 A3

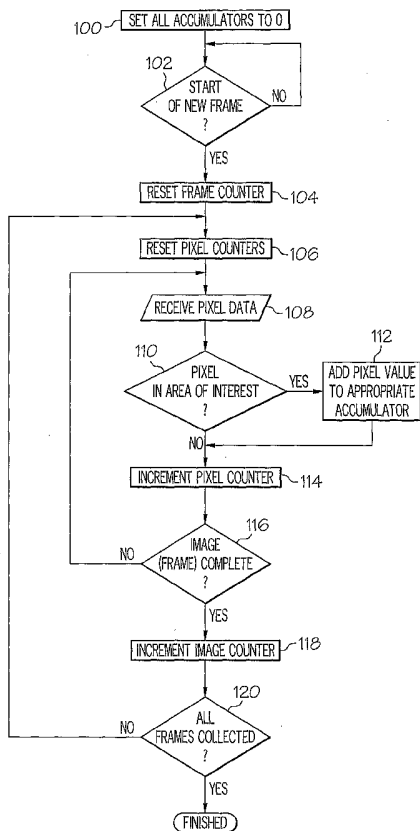
- (51) International Patent Classification:  
G01J 3/46 (2006.01) G01J 3/50 (2006.01)
- (21) International Application Number:  
PCT/US2005/028678
- (22) International Filing Date: 11 August 2005 (11.08.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/600,687 11 August 2004 (11.08.2004) US  
60/600,969 12 August 2004 (12.08.2004) US  
11/128,881 13 May 2005 (13.05.2005) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:  
US 11/128,881 (CIP)  
Filed on 13 May 2005 (13.05.2005)  
US 60/570,562 (CIP)  
Filed on 13 May 2004 (13.05.2004)  
US 60/570,563 (CIP)

Filed on 13 May 2004 (13.05.2004)

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[Continued on next page]

(54) Title: METHOD FOR COLLECTING DATA FOR COLOR MEASUREMENTS FROM A DIGITAL ELECTRONIC IMAGE CAPTURING DEVICE OR SYSTEM



(57) Abstract: A method for providing an intensity or brightness measurement using a digital image-capturing device comprising: selecting a target area within a field of view of the image-capturing device, the target area containing pixels; determining the brightness of pixels in the target area; accumulating the brightness values of the pixels in the target area; and determining a pixel value representative of the pixels in the target area. A device for making color measurements comprising an image-capture device, a processor or logic device, and a memory location for accumulating color data, and the processor or logic device is programmed to perform color measurements by accumulating the data for pixels located in the target area in memory, and determining a representative color value.

WO 2006/020833 A3



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

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv))*

**Published:**

— *with international search report*

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

13 April 2006

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**INTERNATIONAL SEARCH REPORT**

International Application No  
**PCT/US2005/028678**

**A. CLASSIFICATION OF SUBJECT MATTER**

**G01J3/46 G01J3/50**

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)

**G01J H04N G06T**

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 practical, search terms used)

**EPO-Internal**

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/126328 A1 (LEHMEIER MICHELLE R ET AL) 12 September 2002 (2002-09-12)	1,2,4,5, 9,13,14, 17,18
Y	paragraph [0044]; figure 4 paragraph [0049]; figure 7 paragraph [0051]	12
X	US 6 654 048 B1 (BARRETT-LENNARD DAVID ET AL) 25 November 2003 (2003-11-25)  column 8, line 35 - line 46	1,2,4-9, 13,14, 17,18
X	WO 03/029766 A (DIGIEYE PLC; LUO, MING, RONNIER; LI, CHUANGJUN; CUI, GUIHUA) 10 April 2003 (2003-04-10) page 21, line 4 - last line	1,2,4,5, 9,13,14, 17,18
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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 document 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

**22 November 2005**

Date of mailing of the international search report

**25. 01. 2006**

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/028678

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 537 516 A (SHERMAN ET AL) 16 July 1996 (1996-07-16) column 19, line 25 - column 20, line 61 -----	12
A	US 5 526 285 A (CAMPO ET AL) 11 June 1996 (1996-06-11) column 9, line 36 - line 47 -----	1-18

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/028678

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-18

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

Method and apparatus for providing color measurement using a digital image-capturing device.

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2. claims: 19-20

A device for measuring the color of a target area comprising a platen having an aperture through which the color measurement is made.

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/028678

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002126328	A1	DE 10207326 A1 GB 2376739 A	12-09-2002 24-12-2002
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US 5537516	A	NONE	
US 5526285	A	NONE	