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[Continued on next page]

- (54) Title: VISUAL CONDITIONING FOR AUGMENTED-REALITY-ASSISTED VIDEO CONFERENCING

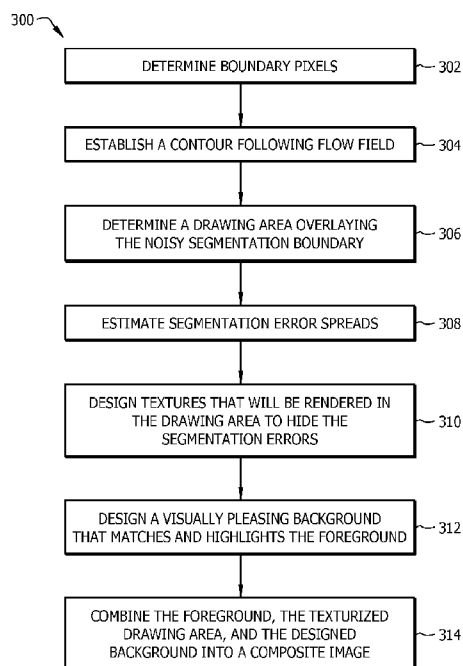


FIG. 3

(57) Abstract: An apparatus comprising a processor configured to receive a video teleconferencing image, wherein the video teleconferencing image has a background and at least one foreground, wherein the foreground has a boundary, determine the boundary of the foreground, overlay the boundary of the foreground with a drawing area, wherein the drawing area obscures the boundary, and replace the background of the image with a new background.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *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))*

Published:

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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. G06T11/60
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)

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 practicable, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	W0 2006/127177 A2 (MICROSOFT CORP [US]) 30 November 2006 (2006-11-30)	1,3,5,6
Y	figures 1-3 sections 1.0,2.1,2.2,2.3.2-2.3.4 -----	4
X	US 2010/150406 A1 (XIAO JING [US] ET AL) 17 June 2010 (2010-06-17) abstract figures 3,4,7 paragraph [0007] - paragraph [0010] paragraph [0070] - paragraph [0084] ----- -/--	1

☒ 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

3 June 2013

Date of mailing of the international search report

16/12/2013

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/035656

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ZHEN TANG ET AL: "Image composition with color harmonization", IMAGE AND VISION COMPUTING NEW ZEALAND (IVCNZ), 2010 25TH INTERNATIONAL CONFERENCE OF, IEEE, 8 November 2010 (2010-11-08), pages 1-8, XP032112985, DOI: 10.1109/IVCNZ.2010.6148796 ISBN: 978-1-4244-9629-7 abstract section 3	4
X,P	----- ONUR G. GULERYUZ ET AL: "Visual conditioning for augmented-reality-assisted video conferencing", 2012 IEEE 14TH INTERNATIONAL WORKSHOP ON MULTIMEDIA SIGNAL PROCESSING (MMSP), 1 September 2012 (2012-09-01), pages 71-76, XP055064100, DOI: 10.1109/MMSP.2012.6343418 ISBN: 978-1-46-734571-2 the whole document	1-7
A	----- EP 1 626 371 A1 (MICROSOFT CORP [US]) 15 February 2006 (2006-02-15) figures 3,4 paragraph [0031] - paragraph [0035] -----	2,7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/035656

Box No. 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 No. 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 fees, this Authority did not invite payment of additional fees.
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.:

1-7

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ 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: 1-7

overlay the boundary of a foreground

2. claims: 8-13

selecting a new background matching a dominant foreground color

3. claims: 14-20

forming a composite image of a foreground, textures, a drawing area and a second background

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/035656

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2006127177 A2	30-11-2006	US 2006268101 A1	30-11-2006
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EP 1626371 A1	15-02-2006	AT 485570 T	15-11-2010
		CN 1734499 A	15-02-2006
		EP 1626371 A1	15-02-2006
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