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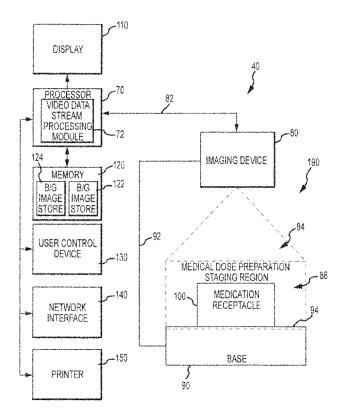
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[Continued on next page]

(54) Title: IMPROVED IMAGE ACQUISITION FOR MEDICAL DOSE PREPARATION SYSTEM



(57) Abstract: Use of improved image acquisition for a medical dose preparation system. The medical dose preparation system may include a work station for capturing medical dose preparation images (e.g., to document preparation of a mediation dose). The medical dose preparation image may be captured by a video data stream processor capable of performing an auto cropping technique on a video data stream received from an image device. Accordingly, memory resources may be more efficiently employed while maintaining high quality medical dose preparation images.

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

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

- 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: 28 August 2014

International application No. **PCT/US2013/032497**

A. CLASSIFICATION OF SUBJECT MATTER

A61M 5/168(2006.01)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) A61M 5/168; H04N 7/18; A61M 5/00; G06F 17/30; G06Q 50/00; A61M 1/00; G06K 9/00; G06Q 10/00

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: medical dose preparation, dosage, image, video, scan, label, capture, display

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | |
|-----------|---|-----------------------|--|
| X | US 2010-0094653 A1 (TRIBBLE, D. et al.) 15 April 2010 See abstract; claims 2, 7-8; figures 7-8. | 1-3,23-25 | |
| A | US 5651775 A (WALKER, R. B. et al.) 29 July 1997 See abstract; claim 1; column 5, lines 3-19; figure 1. | 1-3,23-25 | |
| A | US 7499581 B2 (TRIBBLE, D. et al.) 3 March 2009 See abstract; claim 1; column 8, lines 1-25; figure 2. | 1-3,23-25 | |
| A | US 2007-0239482 A1 (FINN, J. T. et al.) 11 October 2007 See abstract; claim 1; paragraph [0021]; figure 1. | 1-3,23-25 | |
| A | US 2011-0267465 A1 (ALEXANDER, E. H. et al.) 3 November 2011 See abstract; claim 1; paragraph [0069]; figure 2. | 1-3,23-25 | |
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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
- "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

26 June 2014 (26.06.2014)

Date of mailing of the international search report

01 July 2014 (01.07.2014)

Name and mailing address of the ISA/KR



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2013/032497

| Box No. II | Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) | | | | | |
|---|--|--|--|--|--|--|
| This internat | ional search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: | | | | | |
| | nims Nos.: cause they relate to subject matter not required to be searched by this Authority, namely: | | | | | |
| bec ext C | tims Nos.: 6-11,13, 15, 17-18, 22 reasonable they relate to parts of the international application that do not comply with the prescribed requirements to such an ent that no meaningful international search can be carried out, specifically: aims 6-11,13, 15, 17-18, 22 are unclear, beacause it refers to multiple dependent claims which do not comply with PCT Rule 4(a). | | | | | |
| | nims Nos.: 4-5,12, 14, 16, 19-21, 26 cause 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 Interna | tional Searching Authority found multiple inventions in this international application, as follows: | | | | | |
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| | all required additional search fees were timely paid by the applicant, this international search report covers all searchable ims. | | | | | |
| 2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of any 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.: | | | | | | |
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| 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.: | | | | | | |
| Remark or | 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. | | | | | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2013/032497

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|---------------------|-------------------------|------------------|
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| | | WO 2010-045132 A2 | 22/04/2010 |
| | | WO 2010-045132 A3 | 22/07/2010 |
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| | | WO 2006-086222 A2 | 17/08/2006 |
| | | WO 2006-086222 A3 | 23/04/2009 |
| JS 2007-0239482 A1 | 11/10/2007 | WO 2007-047138 A1 | 26/04/2007 |
| JS 2011-0267465 A1 | 03/11/2011 | None | |