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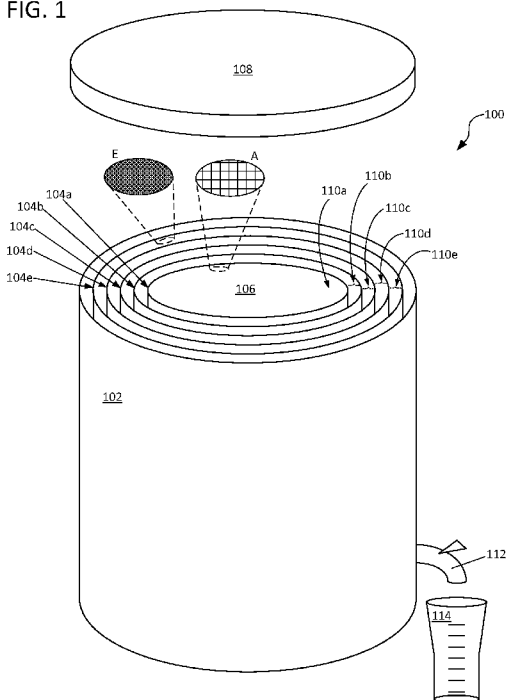
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, 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.
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR ANALYZING AGGREGATE

FIG. 1



(57) Abstract: A device, method, and system for analyzing aggregate are described. An exemplary device may include a housing with one or more grading screens. Aggregate and liquid may be received by a port within the housing. The liquid and any suspended fines, after passing through the one or more grading screens and aggregate, may be received into an observation container for observing the clarity of the liquid.





— *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:
8 November 2012

A. CLASSIFICATION OF SUBJECT MATTER*G01N 33/38(2006.01)i, G01N 15/06(2006.01)i, B07B 1/00(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)

G01N 33/38; B01D 27/00; E21B 43/00; B01D 29/60; B01D 27/06; B01D 29/19

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: analysis, composition, aggregate, grading, screen, and space

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 03768557 A (SPURLOCK, JAMES W. et al.) 30 October 1973 See abstract; col. 2, line 65 - col. 3, line 8; claims 1, 3; fig. 1.	1-23,25-26
A	US 05954451 A (PRESBY, DAVID W.) 21 September 1999 See abstract; col. 9, line 11 - col. 10, line 5; claims 1, 6, 11; fig. 1.	1-23,25-26
A	US 2007-0256834 A1 (HOPKINS, SAM A. et al.) 08 November 2007 See abstract; paras. 9-29; claims 1, 2, 6-9, 11, 19; figs. 1-2.	1-23,25-26
A	US 05215661 A (TANABE, KAZUSHIGE) 01 June 1993 See abstract; col. 1, line 34 - col. 2, line 48; claims 1-2, 6; fig. 1.	1-23,25-26
A	US 2004-0060858 A1 (LUCAS, JEFFREY A. et al.) 01 April 2004 See abstract; paras. 59-62; claims 1, 7; fig. 1.	1-23,25-26

 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 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

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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.: 24
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:

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.:

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/024129

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 03768557 A	30.10.1973	None	
US 05954451 A	21.09.1999	US 2004-0151547 A1 US 6461078 B1 US 7270532 B2	05.08.2004 08.10.2002 18.09.2007
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US 2004-0060858 A1	01.04.2004	None	