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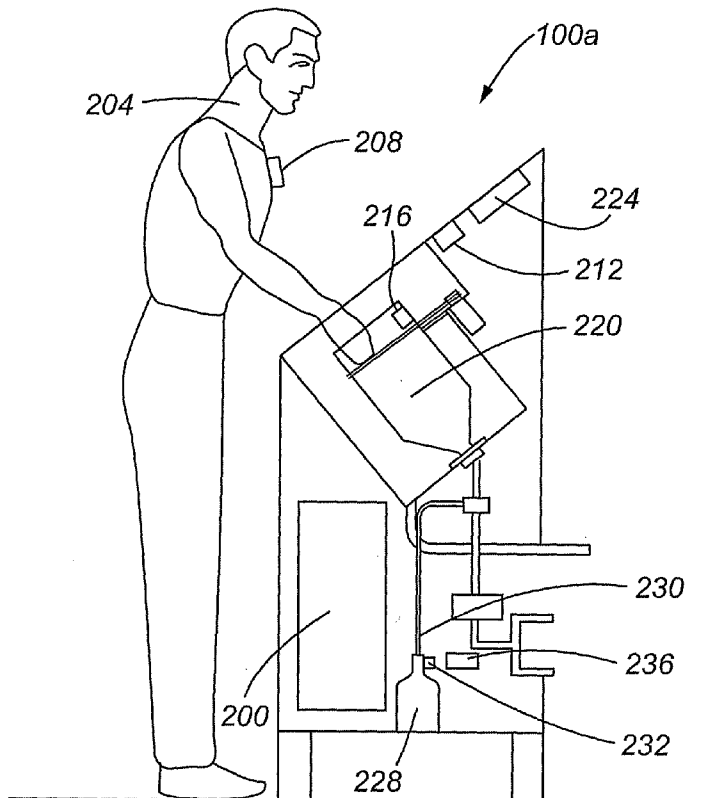
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(54) Title: AUTOMATED WASHING SYSTEM WITH COMPLIANCE VERIFICATION AND AUTOMATED COMPLIANCE MONITORING REPORTING



(57) Abstract: A system is provided for providing automated washing and verifying compliance of use. The system provides for identifying individual users of one or more cleaning stations through various technologies, such as RFID. Individual's use of cleaning stations is monitored to determine compliance with hand-washing requirements. A compliance report may be generated based on data associated with one or more individuals' use of the cleaning station(s). Educational and/or entertainment content may be displayed to the user when he or she is using the cleaning station. Additionally, the cleaning station may identify containers having authorized consumables such as soap or disinfectant. Optional automated collection and forwarding of hygiene compliance information is performed to provide compliance monitors, such as a regulatory agency, with such information.

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 07/83221

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - G06F 19/00 (2008.04)                  USPC - 700/108                  According to International Patent Classification (IPC) or to both national classification and IPC</p>				
<p><b>B. FIELDS SEARCHED</b></p>				
<p>Minimum documentation searched (classification system followed by classification symbols)                  USPC: 700/108</p>				
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                  USPC: 700/108, 109, 111; 705/1, 7, 11, 500 (see also text search below)</p>				
<p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  Electronic Databases Searched: pubWEST, USPTO, Google, Answers.com, Google Patents                  Search Terms Used: automated, washing, station, verification, memory, report, user, web, password, network, data, management, module, custom, cleaning, compliance, protocol, unique, identifier, hub, token, facility, enterprise, data</p>				
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p>				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 2005/0136949 A1 (BARNES) 23 June 2005 (23.06.2005) para [0009]-[0010], [0022]-[0023], [0028]-[0029], [0033], [0040], [0045], [0049]-[0051], [0055], [0057], [0059], [0064], [0068], [0071], [0076]-[0079], [0082], [0086]-[0089], [0098], [0100], [0104]-[0105], [0108], [0130]-[0132], [0134], [0199], [0242], [0245]-[0246], [0248], [0264], [0283], [0285], [0297]-[0304], [0329], [0386]-[0387], [0400]	1-17, 28-30 and 40-41		
Y	US 2004/0054630 A1 (GINTER) 18 March 2004 (18.03.2004) para [0011], [0037], [0050], [0066], [0072], [0080], [0082], [0087], [0107]-[0108], [0122]-[0123], [0126]-[0128], [0160], [0183]-[0184], [0204]-[0205], [0207], [0211], [0213], [0246], [0264], [0266], [0283], [0299], [0359], [0383], [0456], [0479], [0562], [0648], [0807], [0810], [0928], [0940], [1005], [1025], [1048], [1083], [1222], [1224], [1242]-[1243], [1475], [1644], [1649], [1675] and [1804]	1-17, 28-30 and 40-41		
Y	US 2006/0229891 A1 (GRIER) 12 October 2006 (12.10.2006), para [0003] and [0009]-[0014]	1-17		
<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>				
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="vertical-align: top;"> <p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p> </td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>
<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>			
<p>Date of the actual completion of the international search</p> <p>29 June 2008 (29.06.2008)</p>		<p>Date of mailing of the international search report</p> <p align="center"><b>06 AUG 2008</b></p>		
<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents                  P.O. Box 1450, Alexandria, Virginia 22313-1450                  Facsimile No. 571-273-3201</p>		<p>Authorized officer:</p> <p align="center">Lee W. Young</p> <p>PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>		

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/83221

**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.: 18-20, 47-58  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 18-20 and 47-58 are unsearchable because the claims are considered a mere presentation of information, which is not subject to search by this ISA as per PCT Rule 39.1(v).
2.  Claims Nos.: 88-98  
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:  
Claims 89-98 are unsearchable because the claims are omnibus type claims that are not drafted in accordance with PCT Rule 6.2
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:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claims 1-17, 28-30, 40-41 drawn to an automated washing compliance verification system comprising a compliance hub with a memory comprising of a data management module and a plurality of electronic storage locations.

Group II, claims 21-27, 42-46 drawn to a compliance monitoring system for use with at least one hygiene station, the system comprising protocol identifiers being associated with different cleaning protocols.

(See Supplemental Box for continuation)

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 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.:  
1-17, 28-30 and 40-41

**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/US 07/83221

- continuation of LOU -

Group III, claims 31-39, drawn to a method of performing hygiene compliance verification, comprising one more automated sensor.  
Group IV, 59-88, drawn to an automated washing system for a user comprising an identification apparatus, a consumables-authentication module and a solutions selection module.

The inventions listed as Groups I - IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of the Group I invention is an automated washing compliance verification system comprising a compliance hub with a memory comprising of a data management module and a plurality of electronic storage locations. The special technical feature of the Group II invention is a compliance monitoring system for use with at least one hygiene station, the system comprising protocol identifiers being associated with different cleaning protocols. The special technical feature of the Group III invention is a method of performing hygiene compliance verification, comprising one more automated sensor. The special technical feature of the

Group IV invention is an automated washing system for a user comprising an identification apparatus, a consumables-authentication module and a solutions selection module. None of these special technical features are common to the other groups, nor do they correspond to a special technical feature in the other groups. Therefore, unity of invention is lacking.

Unsearchable Claims:

Claims 18-20 and 47-58 are unsearchable because the claims are considered a mere presentation of information, which is not subject to search by this ISA as per PCT Rule 39.1(v).

Claims 89-98 are unsearchable because the claims are omnibus type claims that are not drafted in accordance with PCT Rule 6.2.