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(54) Title: FLUID INTEGRATING SYSTEM FOR PRODUCING AN INTEGRATED FLUID ACCORDING TO CONSUMER-DEFINED PREFERENCES

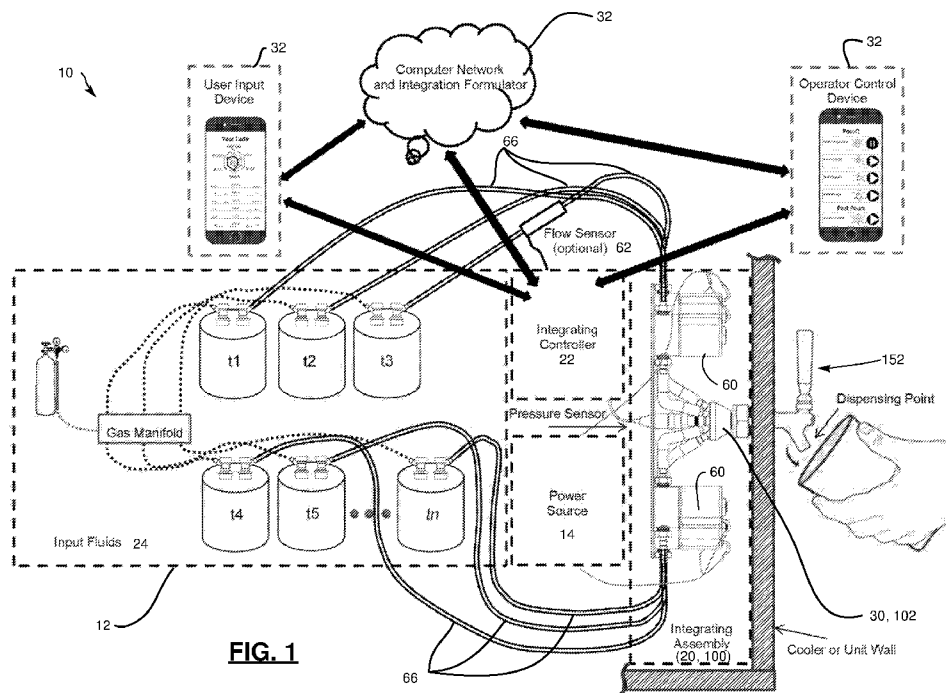


FIG. 1

(57) Abstract: A fluid integrating system (10) includes an integrating manifold (30) having two or more input fluid inlets (132) disposed at oblique angles relative to a center axis of the integrating manifold (30). The two or more input fluid inlets (132) intersect in the integrating manifold (30) to define an integrating chamber (112). The fluid integrating system also includes a pressure sensor (110) fluidly connected to the integrating chamber (112) that is operable to send a pressure signal indicative of the pressure of the fluid in the integrating chamber (112). A integrating controller (22) is operatively coupled to the two or more valves (60) and to the pressure sensor (110) and is operable to selectively control the flow of input fluids into the integrating chamber (112) by actuating the two or more valves (60) based on the pressure signal received from the pressure sensor (110).



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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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. B67D1/00      B67D1/08      B67D1/12      G07F13/06 ADD.				
According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b>				
Minimum documentation searched (classification system followed by classification symbols) B67D G07F				
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				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	EP 2 889 263 A1 (ANHEUSER BUSCH INBEV SA [BE]) 1 July 2015 (2015-07-01)	21		
Y	paragraphs [0001], [0026], [0032] -	22-25		
A	[0066], [0084]; figures 1-5 -----	1,26,27		
A	JP 2002 145396 A (SANYO ELECTRIC CO) 22 May 2002 (2002-05-22) abstract; figures 1, 7, 9 -----	1		
A	WO 2011/084062 A1 (LAYERNATION BEVERAGE SOLUTIONS B V [NL] ET AL.) 14 July 2011 (2011-07-14) page 8, line 12 - page 9, line 22; figures 1, 2A -----	1		
A	EP 1 681 969 A1 (NESTEC SA [CH]) 26 July 2006 (2006-07-26) paragraph [0070] - paragraph [0075] -----	1		
-/--				
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;">                     "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                 </td> <td style="width: 50%; border: none; vertical-align: top;">                     "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                      "&amp;" document member of the same patent family                 </td> </tr> </table>			"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
"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	Date of mailing of the international search report			
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Schultz, Tom			

**INTERNATIONAL SEARCH REPORT**

International application No PCT/US2019/038228
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2016/200852 A1 (ROAD SODA LLC [US]) 15 December 2016 (2016-12-15) claim 19 -----	1
Y	EP 2 292 126 A1 (BIOSAUCE LTD [GB]) 9 March 2011 (2011-03-09) paragraph [0046] -----	22,23
Y	US 2015/212661 A1 (ROBBERECHTS DRIES [BE] ET AL) 30 July 2015 (2015-07-30) paragraph [0018] - paragraph [0021] A paragraphs [0059], [0072] - [0074], [0113] - [0116], [0144] paragrapahs [0153] - [0155], [0213], [0214], [0254], [0264] - [0269]; figure 1 -----	24,25 26,27
A	WO 01/12039 A2 (PROCTER & GAMBLE [US]) 22 February 2001 (2001-02-22) page 22, line 9 - line 19 page 23, line 10 - line 15 page 24, line 30 - page 25, line 19 page 26, line 19 - page 27, line 22 figure 4 -----	21,24, 26,27
A	WO 2012/045860 A1 (NESTEC SA [CH]; FILLIOL CARINE [FR] ET AL.) 12 April 2012 (2012-04-12) page 14, line 26 - page 16, line 6; figures 1-4 -----	21,24, 26,27

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2019/038228

## 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.:

### 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: 1-20

A fluid integrating system wherein dispensing the target fluid includes dispensing an integrated fluid stream having discrete longitudinal flows of the plurality of fluids.

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2. claims: 21-27

A fluid integrating system wherein the custom integration profile is calculated by a computing device receiving user-defined preferences and converting the user-defined preferences to a custom integration profile indicative of the user-defined preferences for the target fluid or wherein the custom integration profile is calculated by an integration formulator based on the user preferences.

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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