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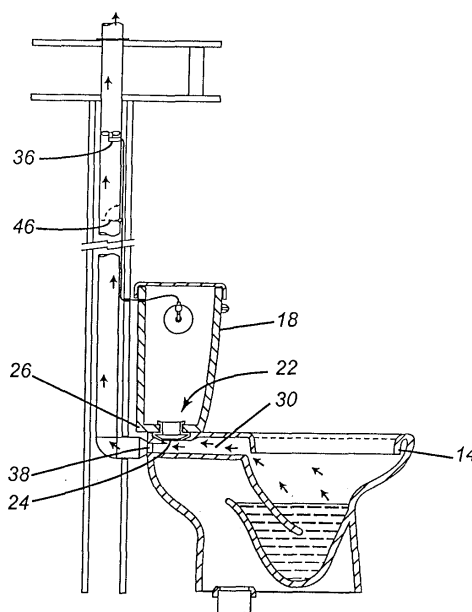
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(54) **Ventilated toilet**

(57) A ventilated toilet includes a toilet bowl having flush holes disposed around a rim of the toilet bowl for discharging water into the toilet bowl, a holding tank for containing a volume of water sufficient to cause the toilet to flush when the volume of water is discharged into the toilet bowl, a flush and refill mechanism for flushing and then refilling the toilet, the flush mechanism controlling a

flush valve that covers a drain in a bottom of the holding tank. The toilet also includes a water feed conduit connecting the drain to the holes around the rim of the bowl. A motion-sensitive switch is connected to a movable portion of the flush and refill mechanism for controlling an air ventilation fan that draws malodorous air from the toilet bowl through the flush holes and conduit and then through an air outlet in the toilet bowl.



**FIG. 2**



## EUROPEAN SEARCH REPORT

Application Number  
EP 10 15 9516

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 1 041 205 A2 (WORRELL GEORGE WILLIAM [GB]) 4 October 2000 (2000-10-04) * paragraphs [0011], [0012], [0014], [0015], [0016] * * figures 1,4 *	1-12	INV. E03D9/05
A	GB 917 933 A (DUNCAN CLEMENT DAVY; JAMES ALAN SUTHERLAND) 13 February 1963 (1963-02-13) * page 1, lines 43-85; figures *	1,4-6,8,12	
A	US 2009/044320 A1 (ABUNAMEH HANI A [JO]) 19 February 2009 (2009-02-19) * column 15; figures 1, 3b *	3,10	
A	GB 493 200 A (STANLEY HARRIS CHURCHILL) 3 October 1938 (1938-10-03) * page 3, lines 86-105 * * page 6, lines 83-129 * * figures 2, 10, 11 *	1,4,11	
A	DE 94 11 849 U1 (REHFUS BERND DIPL ING [DE]) 3 November 1994 (1994-11-03) * figures 14, 15 * * page 9, last paragraph - page 10, paragraph 2 *	1,4,8,11	TECHNICAL FIELDS SEARCHED (IPC) E03D
A	DE 43 11 066 A1 (FROBOESE ERIKA [DE]) 22 September 1994 (1994-09-22) * column 6, lines 6-20 *	6,7	
X	US 6 073 273 A (TILLEN BRUCE [CA]) 13 June 2000 (2000-06-13) * column 4, line 65 - column 5, line 20 * * column 6, lines 8-18 * * figures 1,3,4,6 *	13,14	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 18 September 2012	Examiner Urbahn, Stephanie
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)



## EUROPEAN SEARCH REPORT

Application Number  
EP 10 15 9516

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 39 27 200 A1 (MENGE HEINRICH [DE]) 21 February 1991 (1991-02-21) * column 10, lines 2-15 * * figures 2, 3, 6 * -----	13,14	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 18 September 2012	Examiner Urbahn, Stephanie
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>			

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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-12

ventilated toilet with special positioning of switch

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2. claims: 13, 14

retro-fittable fan adaptor for toilet bowl

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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18-09-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1041205 A2	04-10-2000	NONE	
GB 917933 A	13-02-1963	NONE	
US 2009044320 A1	19-02-2009	NONE	
GB 493200 A	03-10-1938	NONE	
DE 9411849 U1	03-11-1994	NONE	
DE 4311066 A1	22-09-1994	NONE	
US 6073273 A	13-06-2000	CA 2270742 A1 US 6073273 A	30-10-1999 13-06-2000
DE 3927200 A1	21-02-1991	DE 3927200 A1 EP 0424622 A2 JP 3132530 A US 5123125 A	21-02-1991 02-05-1991 05-06-1991 23-06-1992

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82