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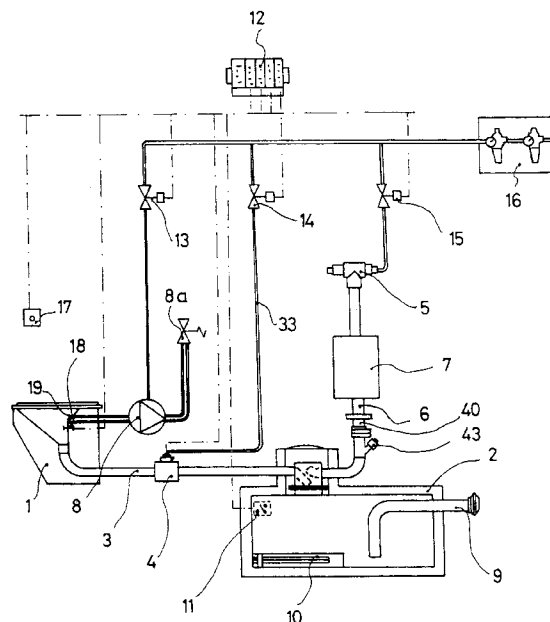
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(54) **Vacuum toilet system for moving installations and civil constructions.**

(57) It comprises a valve (4) which connects each bowl with a waste water storage tank (2), said valve (4) comprising a valve housing (21) with a cylindrical cavity (22) and a rotating cylinder (25) housed therein and provided with a transverse through conduit (26) which, when the valve is in the open position, connects inlet (23) and outlet (24) conduits of the valve, the ends of the transverse conduit being adapted so that the rotating cylinder (25) completes the closing of the inlet conduit (23) and of the outlet conduit (24) non-simultaneously. The border of the ends of said transverse conduit (26) and of the inlet (23) and outlet (24) conduits are provided with a cutting edge, so as to produce a scissor effect.

The system also comprises floating watertight joints (29) arranged within recesses in the adjacent surfaces of each pair of elements that undergo relative movement, said joints (29) being pressed against said surfaces by means of a pneumatic system when the moving elements (25) are at rest.



**FIG. 1**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 93 50 0071

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
D,A	EP-A-0 277 786 (OY WÄRTSILÄ AB) * the whole document *	1	E03F1/00
A	GB-A-2 243 166 (METRA OY AB) * abstract; figure *	1,7	
A	DE-C-183 743 (SOCI T CHAPP E ET FILS)		
A	FR-A-1 313 755 (SOCI T POUR L'UTILISATION RATIONELLE DES GAS)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			E03F F16K E03D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 January 1994	Examiner DE COENE, P
<p><b>CATEGORY OF CITED DOCUMENTS</b></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>			

EPO FORM 1503 03.82 (P04C01)



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### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement 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.
- ☐ Only part 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 inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees has 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:



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# LACK OF UNITY OF INVENTION

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

## 1. Claims 1-3,5-11:

A vacuum toilet system characterised by the valve connecting each bowl with a water storage tank

## 2. Claims 4,5:

A vacuum toilet system characterised by water-tightness means