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(71) Applicant: **ITT INDUSTRIES BELGIUM Société Anonyme**
Avenue Louise 489
B-1050 Bruxelles(BE)

(84) Designated Contracting States:
NL

(71) Applicant: **Deutsche ITT Industries GmbH**
Hans-Bunte-Strasse 19 Postfach 840
D-7800 Freiburg(DE)

(84) Designated Contracting States:
DE

(71) Applicant: **ITT INDUSTRIES INC.**
320 Park Avenue
New York, NY 10022(US)

(84) Designated Contracting States:
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(72) Inventor: **Thysen, Albert Alfons Pieter**
Rodekruislaan 152
B-3744 Bilzen (Grote-Spouwen)(BE)

(72) Inventor: **Timmermans, Gilbert Lambert Joseph**
Ginstraat 43
B-3700 Tongeren s'Herenselderden(BE)

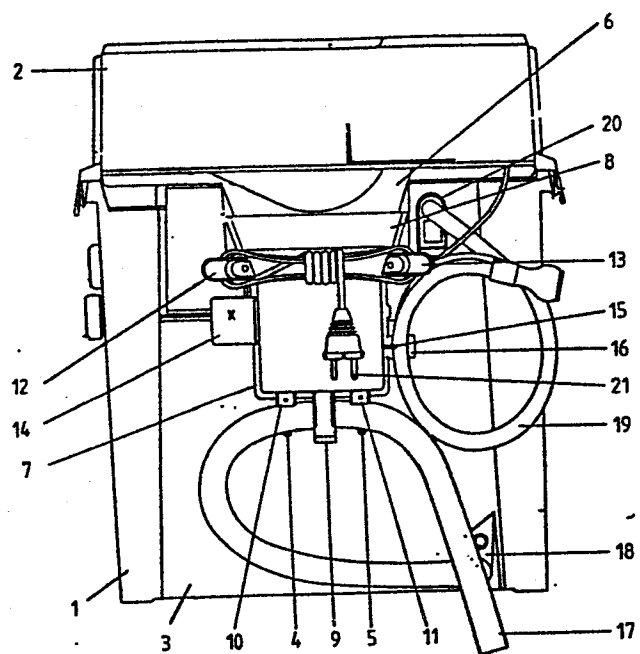
(74) Representative: **Vermeersch, Robert**
BELL TELEPHONE MANUFACTURING COMPANY
Naamloze Vennootschap Patent Department Francis
Wellesplein 1
B-2018 Antwerp(BE)

(54) **Rinsing device.**

(57) In the present rinsing device for a vat of a laundry handling machine, the vat is coupled on the one hand with a supply conduit (19) for a rinsing liquid and on the other hand with a siphon drain tube (17) which has a larger cross-section than said supply conduit (19). The diameter of said siphon drain tube (17) is about twice that of said supply conduit (19).

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RINSING DEVICE

The present invention relates to a rinsing device for a vat, and more particularly for a vat of a laundry handling machine such as the one disclosed in the copending European patent application N° 0059801.

5 An object of the present invention is to provide a rinsing device which does not include movable parts, such as a pump, to supply a rinsing liquid to the vat and remove it therefrom.

 According to the invention this object is achieved
10 due to the fact that said vat is coupled on the one hand with a supply conduit for a rinsing liquid and on the other hand with a siphon drain tube which has a larger cross-section than said supply conduit.

 Another characteristic feature of the present
15 rinsing device is that the diameter of said siphon drain tube is about twice that of said supply conduit.

 In this way, when the vat is filled with a rinsing liquid via the supply conduit this liquid rises in the vat until the siphon action starts, as a consequence of which the
20 vat is emptied via the siphon drain tube more rapidly than it is filled again via the supply conduit. As soon as the siphon action stops the vat is again filled, etc. This operation is repeated as long as fresh rinsing liquid is supplied to the vat via the supply conduit.

25 The above mentioned and other object and features of the invention will become more apparent and the invention

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itself will be best understood by referring to the following description of an embodiment taken in conjunction with the accompanying drawing which shows a rear view of a laundry handling machine provided with a rinsing device according to
5 the invention.

The laundry handling machine is of the type disclosed in the above mentioned European patent application and includes a vat 1 which is closed by a cover having a fixed rear part 2 and a movable front lid (not shown). The
10 rear wall 3 of the vat 1 has two downwardly directed fingers 4 and 5 and at its rear side this vat 1 is provided with a downwardly tapering part 6 and a rear cover member 7 with an upper collar 8, a lower central retaining clip 9, two lower lips 10 and 11, two lateral ears 12 and 13, a lateral housing
15 14 and a lateral substantially U-shaped attachment member 15-16 with lips 15 and 16. The upper collar 8 of the cover member 7 fits on the lower end of the tapering part 6 and this cover member 7 is fixed on the vat 1 by means of screws screwed in the lips 10 and 11 and in the ears 12 and 13. The inlet of a
20 siphon drain tube 17 is fixed on the vat at 18 close to the bottom thereof and in operation its outlet is located below its inlet, as shown. The tube 17 is engaged between the fingers 4 and 5 on the one side and the retaining clip 9 on the other side. A water supply conduit 19 is fixed to the
25 vat 1 at 20 and is engaged between the lips 15 and 16 of the attachment member 15-16. The diameter of drain tube 17 is larger, e.g. two times, than that of supply conduit 19. At a certain distance below conduit 19 the vat has an overflow opening (not shown). The ears 12 and 13 serve for winding up
30 an electricity supply cable 21.

The operation of the rinsing device is as follows and is for instance performed after a washing operation i.e. after the washing solution has been drained off from vat 1. The siphon tube 17 is brought in the position shown and
35 water is admitted into the vat 1 through the water supply

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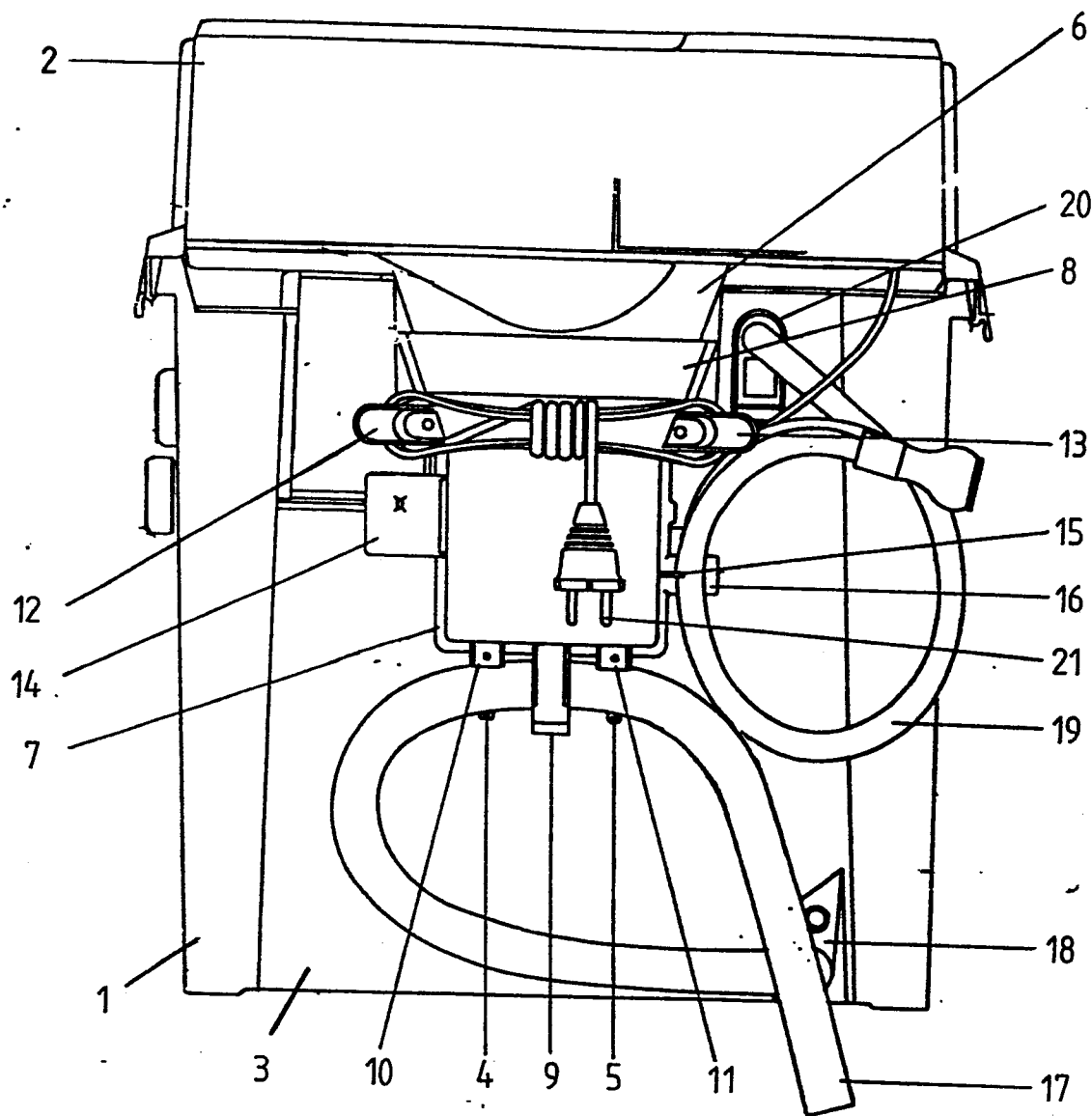
conduit 19 and with a suitable flow rate. As a consequence the vat 1 becomes gradually filled and the water level rises therein as well as in the siphon drain tube 17. When it reaches a sufficiently high level the siphon action is triggered
5 and water is thereby drained off the vat 1. By the suitable choice of the diameter of the siphon tube 17 and of the water supply conduit 19 the water level in the washing compartment 3 thereby gradually decreases i.e. the vat is emptied via the siphon drain tube more rapidly than it is filled again
10 through the supply conduit. However, upon reaching a predetermined level the siphon action stops and because water is still being supplied to the vat through the supply conduit 19 the water level will then again rise in this vat, etc. In this way the vat 1 is repeatedly filled and emptied so that
15 the laundry is rinsed as long as water is admitted in the vat 1.

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CLAIMS

1. Rinsing device for a vat, characterized in that said vat (1) is coupled on the one hand with a supply conduit (19) for a rinsing liquid and on the other hand with a siphon drain tube (17) which has a larger cross-section than
5 said supply conduit (19).

2. Rinsing device according to claim 1, characterized in that the diameter of said siphon drain tube (17) is about twice that of said supply conduit (19).





European Patent
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EUROPEAN SEARCH REPORT

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Application number

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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.4)
X	DE-U-1 807 023 (SIEMENS) * Complete document *	1,2	D 06 F 35/00
X	CH-A- 354 410 (ROTHENBERGER) * Complete document *	1,2	
A	DE-B-1 109 130 (SCHULTHESS) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			D 06 F 35/00 D 06 F 39/00
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 27-11-1984	Examiner KLITSCH G
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	