

REPUBLIC OF SOUTH AFRICA
PATENTS ACT, 1978

APPLICATION TO AMEND A COMPLETE SPECIFICATION

(Section 51(1) - Regulation 52(2))

SPOOR P

OFFICIAL APPLICATION NO.			LODGING DATE		S & F REF
21	01	2016/00020	22	15 MAY 2014	PA164303/ZA

FULL NAME(S) OF APPLICANT(S)	
71	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

ADDRESS FOR SERVICE	
74	SPOOR & FISHER , 11 Byls Bridge Boulevard, Building No. 14, Highveld Ext 73, Centurion, 0157, South Africa (P O Box 454, PRETORIA, 0001, South Africa) DOCEX 61 PRETORIA

TITLE OF INVENTION	
54	MECHANICAL AUTOMATIC URINAL TOILET FLUSHER

The Applicant hereby applies to amend the complete specification contained in the above application as shown on the attached relevant pages of that specification. The full reasons for making the amendment are as follows:

To amend the dependencies of claims 4 and 6 so as to provide antecedent basis for the first and second portions of the inlet dual valve and the first and second portions of the outlet dual valve respectively, thereby to define the invention more clearly.

Dated: 7th February 2017

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SPOOR & FISHER
PATENT ATTORNEYS FOR THE APPLICANT(S)

CERTIFICATE

Copies of pages 12 and 13 of South African Patent Application No. 2016/00020, entitled “Mechanical Automatic Urinal Toilet Flusher”, indicating the proposed amendments in red wherein insertions have been underlined and deletions have been struck off.

Dated this 7th day of February 2017

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SPOOR & FISHER
APPLICANT’S PATENT ATTORNEYS

5 **We Claim:**

1. A system for facilitating an automatic urinal toilet flushing comprising:
 - a pipe (P) having an intermediate enlarged inner diameter area, said pipe comprising:
 - 10 ○ a first portion P_1 having a first diameter d_1 ;
 - a second portion P_2 having a second diameter d_2 ;
 - a third portion P_3 having a third diameter d_3 ; wherein the first, the second and the third portions are sequential and the diameter d_2 is greater than diameter d_1 and diameter d_3 ;
 - 15 ○ a tapered forth portion P_4 connecting the first portion P_1 to the second portion P_2 ; and
 - a tapered fifth portion P_5 connecting the second portion P_2 to the third portion P_3 ;
 - a valve mechanism located within the pipe (P), the said valve mechanism comprising an inlet dual valve (1), an outlet dual valve (2) and a connecting rod connecting the
20 inlet dual valve (1) and outlet dual valve (2); and
 - an actuating mechanism that gets automatically actuated and upon actuation, operates the valve mechanism to perform a flushing operation.
2. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein
25 the actuating mechanism operates the inlet and outlet dual valves such that when the inlet dual valve is in a closed position, the outlet dual valve is maintained in an open position and vice-versa.
3. The system for facilitating automatic urinal toilet flushing as claimed in claim
30 1, wherein the inlet dual valve comprises a first and a second portion, with the second portion comprising a tapered diameter.
4. The system for facilitating automatic urinal toilet flushing as claimed in ~~any of claims 2~~
~~or~~ 3, wherein in the closed position the first and second portion of the inlet dual valve co-
35 operates with the first and the forth portions P_1 and P_4 of the pipe, respectively.
5. The system for facilitating automatic urinal toilet flushing as claimed in claim
1, wherein the outlet dual valve comprises a first and a second portion, with the second
portion comprising a tapered diameter.

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6. The system for facilitating automatic urinal toilet flushing as claimed in ~~any of claims 2 or 5~~, wherein in the closed position the first and second portion of the outlet dual valve co-operates with the third and the fifth portions P_3 and P_5 of the pipe, respectively.

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7. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein the actuating mechanism comprises:
a mechanical platform (10) which compresses under the weight of person; and
a connecting cable (8) adapted to connect both the dual-valve with a mechanical platform (10).

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8. The system for facilitating automatic urinal toilet flushing as claimed in claim 7, wherein mechanical platform is mounted upon a base in a movable manner, and separated from and base by a set of resilient means, such that upon actuation the mechanical platform moves closer to the base.

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9. The system for facilitating automatic urinal toilet flushing as claimed in claim 8, wherein the base is provided with a set of motion limiting structures so as to maintain a minimum distance between the base and the mechanical platform.

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10. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, further comprising a resilient means (7) adapted to retain in its normal position the inlet dual-valve in the closed position and the outlet dual-valve in the open position.

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11. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein the third portion P_3 of the pipe is adopted to hold a predetermined quantity of water therein for flushing purposes.

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12. The system for facilitating automatic urinal toilet flushing as claimed in claim 3, wherein the inlet dual valve comprises a resilient sealing means disposed between the first and a second portion.

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13. The system for facilitating automatic urinal toilet flushing as claimed in claim 5, wherein the outlet dual valve comprises a resilient sealing means disposed between the first and a second portion.

5 **We Claim:**

1. A system for facilitating an automatic urinal toilet flushing comprising:
 - a pipe (P) having an intermediate enlarged inner diameter area, said pipe comprising:
 - a first portion P_1 having a first diameter d_1 ;
 - 10 ○ a second portion P_2 having a second diameter d_2 ;
 - a third portion P_3 having a third diameter d_3 ; wherein the first, the second and the third portions are sequential and the diameter d_2 is greater than diameter d_1 and diameter d_3 ;
 - a tapered forth portion P_4 connecting the first portion P_1 to the second portion
 - 15 P_2 ; and
 - a tapered fifth portion P_5 connecting the second portion P_2 to the third portion P_3 ;
 - a valve mechanism located within the pipe (P), the said valve mechanism comprising an inlet dual valve (1), an outlet dual valve (2) and a connecting rod connecting the
 - 20 inlet dual valve (1) and outlet dual valve (2); and
 - an actuating mechanism that gets automatically actuated and upon actuation, operates the valve mechanism to perform a flushing operation.
2. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein
- 25 the actuating mechanism operates the inlet and outlet dual valves such that when the inlet dual valve is in a closed position, the outlet dual valve is maintained in an open position and vice-versa.
3. The system for facilitating automatic urinal toilet flushing as claimed in claim
- 30 1, wherein the inlet dual valve comprises a first and a second portion, with the second portion comprising a tapered diameter.
4. The system for facilitating automatic urinal toilet flushing as claimed in claim 3, wherein
- 35 in the closed position the first and second portion of the inlet dual valve co-operates with the first and the forth portions P_1 and P_4 of the pipe, respectively.
5. The system for facilitating automatic urinal toilet flushing as claimed in claim
- 1, wherein the outlet dual valve comprises a first and a second portion, with the second
- portion comprising a tapered diameter.

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6. The system for facilitating automatic urinal toilet flushing as claimed in claim 5, wherein in the closed position the first and second portion of the outlet dual valve co-operates with the third and the fifth portions P_3 and P_5 of the pipe, respectively.
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7. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein the actuating mechanism comprises:
a mechanical platform (10) which compresses under the weight of person; and
a connecting cable (8) adapted to connect both the dual-valve with a mechanical platform (10).
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8. The system for facilitating automatic urinal toilet flushing as claimed in claim 7, wherein mechanical platform is mounted upon a base in a movable manner, and separated from and base by a set of resilient means, such that upon actuation the mechanical platform moves closer to the base.
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9. The system for facilitating automatic urinal toilet flushing as claimed in claim 8, wherein the base is provided with a set of motion limiting structures so as to maintain a minimum distance between the base and the mechanical platform.
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10. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, further comprising a resilient means (7) adapted to retain in its normal position the inlet dual-valve in the closed position and the outlet dual-valve in the open position.
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11. The system for facilitating automatic urinal toilet flushing as claimed in claim 1, wherein the third portion P_3 of the pipe is adopted to hold a predetermined quantity of water therein for flushing purposes.
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12. The system for facilitating automatic urinal toilet flushing as claimed in claim 3, wherein the inlet dual valve comprises a resilient sealing means disposed between the first and a second portion.
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13. The system for facilitating automatic urinal toilet flushing as claimed in claim 5, wherein the outlet dual valve comprises a resilient sealing means disposed between the first and a second portion.