

<b>FORM 1</b> <b>THE PATENTS ACT 1970</b> <b>(39 OF 1970)</b> <b>&amp;</b> <b>The Patents Rules, 2003</b> <b>APPLICATION FOR GRANT OF</b> <b>PATENT</b> <b>(See section 7,54 &amp; 135 and rule 20 (1))</b>		<b>(FOR OFFICE USE ONLY)</b>  <b>Application No.:</b> <b>Filing Date:</b> <b>Amount of Fee Paid:</b> <b>CBR No.:</b> <b>Signature:</b>		
<b>1. APPLICANT</b>				
Name		Nationality		Address
DUTT, Avijit		Indian		A2, Ridge Castle Aptt., Dadabari Rd., Mehrauli, New Delhi- 110030, India.
<b>2. INVENTOR (S)</b>				
Name		Nationality		Address
DUTT, Avijit		Indian		A2, Ridge Castle Aptt., Dadabari Rd., Mehrauli, New Delhi- 110030, India.
<b>3. TITLE OF THE INVENTION</b>				
<b>“ Secure Access Environment-Friendly Toilet System”</b>				
<b>4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORIZED PATENT AGENT IN INDIA</b>			Telephone No. : 0120-2342010/3104849 Fax No. 0120-2342011 Mobile No. 9810617992 E-mail : tarun@khuranaandkhurana.com	
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<b>5. PRIORITY PARTICULARS OF THE APPLICATION (S) FILED IN CONVENTION COUNTRY</b>				
Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
-	-	-	-	-
<b>6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE</b>				
International application number			N.A.	
-			-	
<b>9. DECLARATIONS :</b>				

**(i) Declaration by the Inventor(s)**

We, the above named inventor(s) are the true & first inventor(s) for this invention and declare that the applicant(s) herein is our assignee.

1. (a) Date : 25<sup>th</sup> June' 2014

(b) Signature (s) :

(c) Name(s) : **DUTT, Avijit**

**(iii) Declaration by the applicant (s):**

**I/We, the applicant(s) hereby declare(s) that:**

- We are in possession of the above mentioned invention.
- The Provisional specification relating to the invention is filed with this application
- There is no lawful ground of objection to the grant of the Patent to me/us.
- I am/We are the assignee or legal representative of true & first inventors.

**Disclosure statement for Patent Filing for 'DigniT'**

Background:

Women in villages and cities across the country have to wake before sunrise and then wait the whole day for relieving themselves; in the cover of darkness, after sunset. Often having to deal with snakebites, hazards of undulating topography and the danger of men pouncing on them for sexual satisfaction. This brutal repression of Women from performing basic biological urges results in various gynecological crises.

88% of Panchayats witness open defecation. The dangers of human waste mixing with drinking water extend far beyond Diarrhea to Typhoid, Cholera and Hepatitis.

A solution has to be found addressing the stress points:

- A dignified Toilet solution that offers privacy at anytime of the day
- A safe and secure convenience
- That doesn't give off an offensive smell and protects the environment from discharge of harmful bacteria
- Where all discharge is treated and re-used by the community
- No human handling of sludge/scavenging
- A facility that has no downtime and minimal maintenance
- The solution is in the DRDO researched Bio Digester Toilets
- It is expected that bio-toilets can save billions of dollars for any government in waste management and to ensure good health for all
- Add to it the following features and you have the complete sustainable solution that is secure

### **The linear definition of the DigniT for Women only!**

- Housed in a designed stall that allows cross ventilation and secure locking, it has a roof of Solar Panels to meet the power requirements.
- Access is only via Biometrics Iris reader read by the door mounted device
- Using existing data of UIDAI
- Forced access will result in lights and alarms going off
- The waterless steel pan results in banishing odour
- The flushing system from the recycled water
- The sewage system is a Bio Digester Tank with panels of Bacteria to process the effects and give off methane and water
- The Methane is used as Bio-gas to feed the community and charged by metering the output, however, this calls for a compression plant
- The revenue from it going to the Women's Self Help Group who look after the maintenance of the convenience
- The treated water (passed through a reed bed) is stored in a separate Tank and used for flushing, pumped up to the overhead water tank by hand pump
- The raw water good (free of Pathogens) can be used for Agriculture or recycled

### **The Sustainable solution whose time has come**

The DigniT process is a secure sustainable process that gives the reins of ownership to the Women's Self Help Group and the Panchayats. There is great social capital that can be generated from the functional toilets, which is only the starting point. Disease is also warded off and it empowers one half of the people power that holds up the sky, the Women!

A mirror image, 5 Pan facility without the Access Control could be placed opposite this for Men to use. It empowers the entire village while being water positive.

Avijit Dutt