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ENTREPRENEURSHIP DEVELOPMENT CELL AND INCUBATION CENTRE

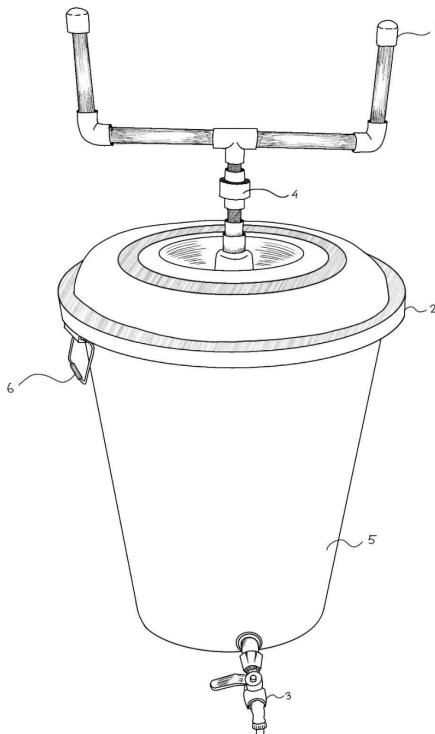
ST. XAVIER'S COLLEGE (AUTONOMOUS),
KOLKATA



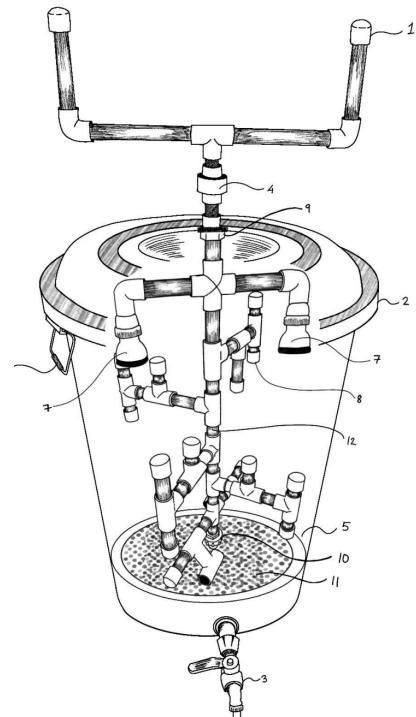
BIOACTIVE MECHANISED AEROBIC COMPOSER

A NEW FUTURE OF COMPOSTING

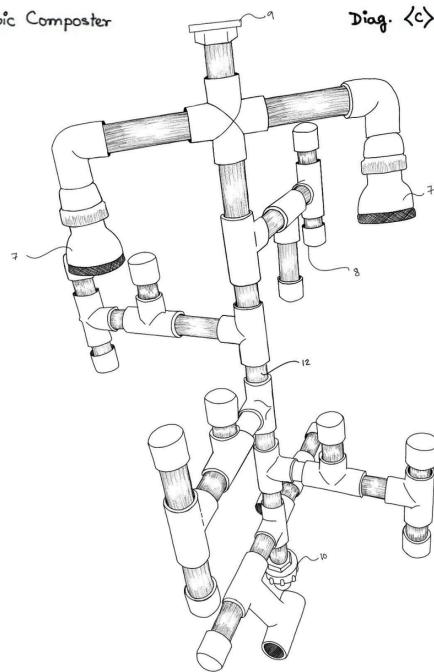
ABOUT THE MODEL



Diag. <a> External View of Bioactive Mechanised Aerobic Composter



Diag. <c> Internal View of Bioactive Mechanised Aerobic Composter



Diag Central Rod with stirrer structures.

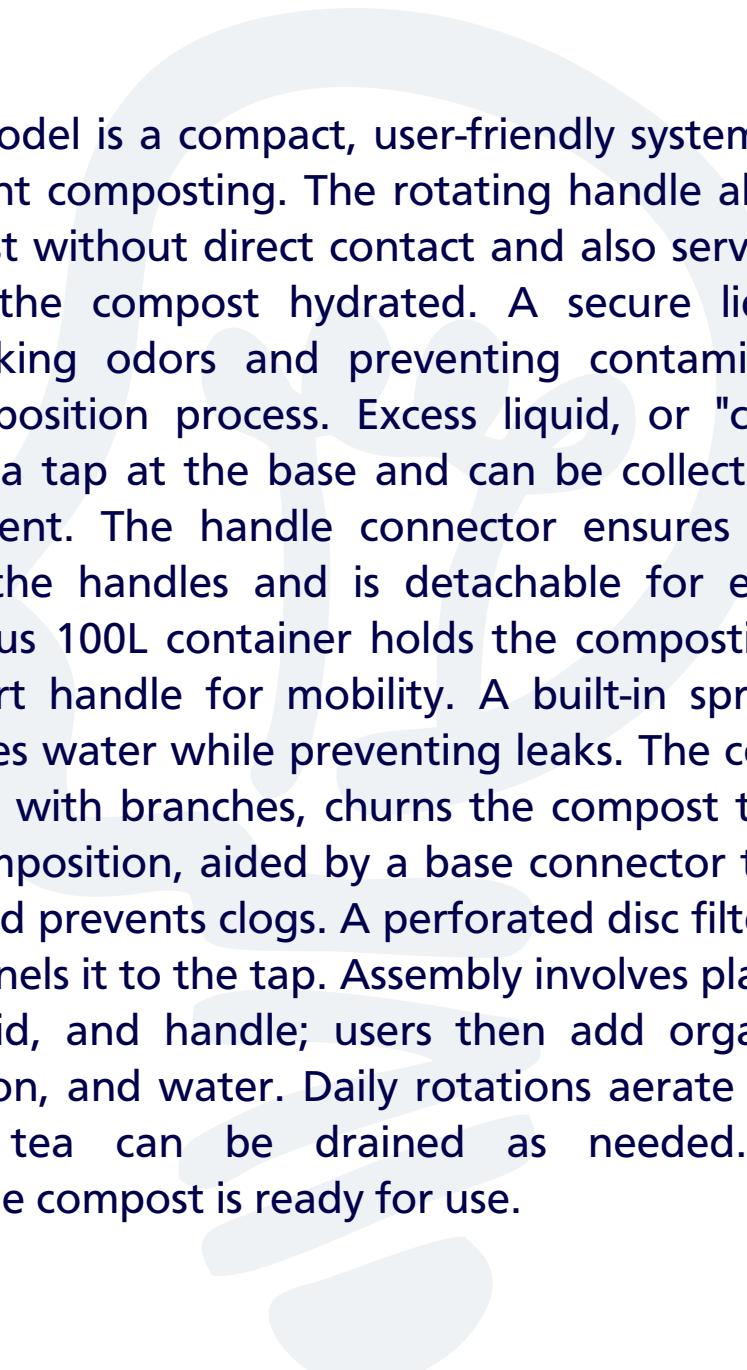


ABOUT THE MODEL

This composting system is designed for ease, efficiency, and cleanliness. The handle and rotator allow users to mix compost without direct contact, keeping hands clean and reducing exposure to odours. The handle also serves as a water conduit, enabling users to add water to the compost through caps on each arm, ensuring optimal moisture levels for aerobic composting. The lid prevents odour release and protects users from harmful microbes, maintaining a controlled environment. A nozzle bib cock tap at the base filters out excess liquid (compost tea), helping maintain the right moisture balance and allowing easy drainage. The handle arc and connector synchronize the rotation of both handles for easy mixing, and these can be detached for cleaning. The compost container holds raw materials (food scraps, yard waste) and can be customized in size, with the prototype using a 100L container. A metal handle on the lid allows for easy transport. The water sprinkler system ensures even water distribution across the compost. The rotator shaft, with multiple branches, helps mix and aerate the compost, promoting effective decomposition. The connector joins the handle and rotator, ensuring synchronized rotation and water flow, and can be detached for cleaning. The base connector holds the rotator in place, providing stability to the system. Overall, this composting system makes composting cleaner, more efficient, and user-friendly, minimizing exposure and effort while maintaining optimal conditions for decomposition.



ABOUT THE MODEL



The compost model is a compact, user-friendly system designed to facilitate efficient composting. The rotating handle allows users to mix the compost without direct contact and also serves as a water inlet to keep the compost hydrated. A secure lid covers the container, blocking odors and preventing contamination for a smooth decomposition process. Excess liquid, or "compost tea," drains through a tap at the base and can be collected for use as plant nourishment. The handle connector ensures synchronized movement of the handles and is detachable for easy cleaning. Inside, a spacious 100L container holds the composting materials, with a transport handle for mobility. A built-in sprinkler system evenly distributes water while preventing leaks. The central rotator shaft, equipped with branches, churns the compost to aerate and speed up decomposition, aided by a base connector that stabilizes the structure and prevents clogs. A perforated disc filters out excess water and channels it to the tap. Assembly involves placing the disc, rotator shaft, lid, and handle; users then add organic waste, a microbial solution, and water. Daily rotations aerate the compost, and compost tea can be drained as needed. Once fully decomposed, the compost is ready for use.

PATENT e-Filing RECEIPT

Controller General of Patents, Designs & Trade Marks



सत्यमेव जयते

G.A.R.6
[See Rule 22(1)]
RECEIPT



Docket No 11350

Date/Time 2024/03/09 01:45:08

To
Rupkatha Ganguly

UserId: rupkatha

14, Road No. -7, H.B. Town, Sodepur

CBR Detail:

Sr. No.	App. Number	Ref. No./Application No.	Amount Paid	C.B.R. No.	Form Name	Remarks
1	202431016997	TEMP/E-1/20679/2024-KOL	1600	4934	FORM 1	A BIOACTIVE MECHANIZED AEROBIC COMPOSTER
2	E-12/260/2024/KOL	202431016997	2500	4934	FORM 9	----

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0001356975	Online Bank Transfer	0903240000232	4100.00	147500102000001

Total Amount : ₹ 4100.00

Amount in Words: Rupees Four Thousand One Hundred Only

Received from Rupkatha Ganguly the sum of ₹ 4100.00 on account of Payment of fee for above mentioned Application/Forms.

* This is a computer generated receipt, hence no signature required.

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