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(54) Title of the invention : A FERMENTATION PROCESS TO YIELD THE VALUE-ADDED LIMONENE FROM SUGARCANE BAGASSE AS A SUBSTRATE

<p>(51) International classification :C11D0003180000, A61K0008310000, A61Q0019100000, A61K0031015000, C11D0003220000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Brainware University, Kolkata</b> Address of Applicant :398, Ramkrishnapur Rd, Near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 ----- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Sayantan Ghosh</b> Address of Applicant :HOD and Assistant Professor, Department of Biotechnology, Brainware University, Barasat Campus, 398, Ramkrishnapur Road, Barasat, Kolkata 700125 ----- -----</p> <p><b>2)Dr. Prashant Shukla</b> Address of Applicant :Guest Professor, Department of Biotechnology, Brainware University, Barasat Campus, 398, Ramkrishnapur Road, Barasat, Kolkata 700125 ----- -----</p> <p><b>3)Dr. Suman Majumder</b> Address of Applicant :Director Project, Brainware University, Barasat Campus, 398, Ramkrishnapur Road, Barasat, Kolkata 700125 ----- -----</p>
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(57) Abstract :

[026] The present invention relates to the novel fermentation process to yield value added limonene and other products using Baker's yeast from Sugarcane Bagasse as a substrate. The present invention discloses production of D-limonene from sugarcane bagasse, which is a non-citrus waste product. D-Limonene has been designated as a chemical with low toxicity based upon lethal dose (LD50) and repeated-dose toxicity studies to animals. It generally is used in food and beverage industries. In pharmaceuticals, limonene is added to help medicinal ointments and creams for the skin. In manufacturing, limonene is used as a fragrance, cleaner (solvent) and as an ingredient in household cleaning products, cosmetics, and personal hygiene products. The sugarcane bagasse pre-treated with acid followed by neutralization used as the raw material for the submerged fermentation. After three days of fermentation, the GCMS result confirmed the presence of D-limonene.

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