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(54) Title of the invention : APPARATUS FOR PURIFYING AIR USING ALGAE

<p>(51) International classification :B01D0053840000, B01D0053600000, C01B0013020000, B01D0053860000, B01D0053620000</p> <p>(86) International Application No :NA Filing Date :NA</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)Chitkara University</b> Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. -----</p> <p><b>2)Chitkara Innovation Incubator Foundation</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)MALIK, Parshant</b> Address of Applicant :Chitkara Business School, Chitkara University, Chandigarh-Patiala National Highway, Village Jansla, Rajpura, Punjab - 140401, India. -----</p> <p><b>2)NIJJER, Shivinder</b> Address of Applicant :Chitkara Business School, Chitkara University, Chandigarh-Patiala National Highway, Village Jansla, Rajpura, Punjab - 140401, India. -----</p> <p><b>3)SHARMA, Sandhir</b> Address of Applicant :Chitkara Business School, Chitkara University, Chandigarh-Patiala National Highway, Village Jansla, Rajpura, Punjab - 140401, India. -----</p> <p><b>4)GOYAL, Shikha</b> Address of Applicant :Mittal Business School, Lovely Professional University, alandhar - Delhi, Grand Trunk Rd, Phagwara, Punjab - 144001, India. -----</p> <p><b>5)VERMA, Rajit</b> Address of Applicant :Chitkara Business School, Chitkara University, Chandigarh-Patiala National Highway, Village Jansla, Rajpura, Punjab - 140401, India. -----</p> <p><b>6)AGGARWAL, Rashmi</b> Address of Applicant :Chitkara Business School, Chitkara University, Chandigarh-Patiala National Highway, Village Jansla, Rajpura, Punjab - 140401, India. -----</p>
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(57) Abstract :

An apparatus (100) for purifying polluted air by using algae by reducing carbon dioxide nitrogen oxide and sulfur from the polluted air and generating oxygen. The apparatus (100) comprises a housing (102) to be attached to a wall of a room to overcome space issues in a home. The housing (102) accommodates a container (104) filled with a fluid including the algae, openings (108) for receiving the polluted air into the fluid to dissolve carbon dioxide and nitrogen oxide and/or sulfur oxide in the fluid, and illumination means (106) for radiating a light to the fluid. Moreover, upon radiating the light to the fluid in the presence of carbon dioxide, photosynthesis of the algae is promoted to convert carbon dioxide into oxygen. As a result, the proposed apparatus (100) purify the polluted air to generate a purified air that is rich in oxygen.

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