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(54) Title of the invention : PLASMA FILTER FOR AUTOMOBILE EXHAUST.

<p>(51) International classification :H01J0037320000, A61B0018140000, H05H0001240000, C23C0016452000, B01D0053940000</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 : 1)Dr. G. DIVYA DEEPAK Address of Applicant :Assistant Professor, Dept. of Mechanical Engineering, Alliance College of Engg. and Design, Alliance University - Central Campus, Chikkahadage Cross, Chandapura - Anekal, Main Road, Bengaluru, Karnataka 562106, India -----</p> <p>2)Dr. ATUL 3)Dr. RANJAN KUMAR Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr. G. DIVYA DEEPAK Address of Applicant :Assistant Professor, Dept. of Mechanical Engineering, Alliance College of Engg. and Design, Alliance University - Central Campus, Chikkahadage Cross, Chandapura - Anekal, Main Road, Bengaluru, Karnataka 562106, India -----</p> <p>2)Dr. ATUL Address of Applicant :Assistant Professor, Dept. of Mechanical Engineering, Alliance College of Engg. and Design, Alliance University - Central Campus, Chikkahadage Cross, Chandapura - Anekal, Main Road, Bengaluru, Karnataka 562106, India. -----</p> <p>3)Dr. RANJAN KUMAR Address of Applicant :Assistant Professor, Dept. of Mechanical Engineering, School of Engineering, Swami Vivekananda University, Barrackpore, Kolkata, West Bengal – 700121, India. -- -----</p>
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(57) Abstract :

The present invention discloses a plasma based system for filtering automobile exhaust comprising an electrode assembly and a particulate trapping medium. The electrode assembly include at least one ground electrode and at least one active electrode selectively and co-operatively disposed with respect to each other for DBD based plasma discharging and ensure flow of the automobile exhaust wherein particulates in the automobile exhaust are trapped on the medium and oxidised by radicals produced by the plasma discharge.

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