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(54) Title of the invention : SYSTEM CONTROLLED FUSION REACTOR UTILIZING ELECTRIC DIPOLAR REACTOR AND CORONA DISCHARGE PRINCIPLE

<p>(51) International classification :C01B 131100, G21B 010000, G21B 010500, G21B 011100, G21B 011300</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 : 1)Chitkara University Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Patiala -----</p> <p>2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)SINGH, Navdeep Address of Applicant :Chitkara University Institute of Engineering & Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>2)DUTTA, Rubina Address of Applicant :Department of Electronics & Communication Engineering, Chitkara University Institute of Engineering & Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p>
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(57) Abstract :

A controlled fusion reactor system 102 facilitates the fusion of hydrogen isotopes using a strong electric field within an electric dipolar chamber. The system comprises a vacuum chamber, bottom and top plates connected to a high potential generator, pairs of pointed objects, metallic hollow tubes separated by insulating material, fuel ducts, and an exit duct. The vacuum chamber maintains a low-pressure environment for fusion. The plates create a strong electric field within the tubes, where deuterium is injected and ionized. Ionized deuterium atoms collide and fuse, forming products that are evacuated through the exit duct. The released energy heats surrounding water, generating steam for electricity production. The system's potential can be adjusted to control deuterium ion velocity, ensuring sufficient kinetic energy for fusion. In one embodiment, helium3 is produced and reacted with deuterium, releasing additional energy to increase reactor efficiency

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