(19) INDIA

(22) Date of filing of Application: 18/10/2023 (43) Publication Date: 24/11/2023

## (54) Title of the invention : A SYSTEM AND PROCESS FOR REMEDIATION OF WASTE WATER DURING COAL BED METHANE PRODUCTION

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(51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date	:C02F0001420000, B09C0001080000, C02F0001660000, E21B0043000000, C02F0001520000 :NA :NA :NA :NA :NA	Satna, Madhya Pradesh  2)Dr. Dhirendra Pal  3)Dr. Shailendra Yadav  4)Mr. Anant Kumar Soni Name of Applicant: NA  Address of Applicant: NA  (72)Name of Inventor:  1)Dr. Dhirendra Pal  Address of Applicant: N 8/236-F-S, Hanuman Nagar Colony, Newada, Sunderpur, Varanasi 221005, Uttar Pradesh  2)Dr. Shailendra Yadav  Address of Applicant: Head Department of Chemistry, AKS University, Satna, Madhya Pradesh India  3)Mr. Anant Kumar Soni  Address of Applicant: Pro Chancellor, AKS University, Madhya Pradesh, India

## (57) Abstract:

The present invention discloses the system and process for remediation of wastewaters from coal bed methane (CBM) production. The present invention relates to the system and process for treating waste water from coal bed methane production sites containing high concentrations of soluble salts like sodium and / or other cations and converting the same into processed water that has significantly reduced salt load, electrical conductance and sodium adsorption ratio (SAR) rendering it safe for agricultural use and aquatic life when discharged into water streams. It further discloses remediation process of CBM produced water of high sodium concentration to well below the acceptable regulatory limits based on ion-exchange technology for removal of ionic impurities from water.

No. of Pages: 22 No. of Claims: 9