

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141026467 A

(19) INDIA

(22) Date of filing of Application :14/06/2021

(43) Publication Date : 02/07/2021

(54) Title of the invention : HIGH-PERFORMANCE CU BASED ELECTRODE DESIGN FOR ELECTROLYTIC ANTIFOULING IN MARINE WATERS

(51) International classification	:C09D0005160000, C04B0018020000, B01J0020300000, B22F0003100000, H01G0011260000	(71)Name of Applicant : 1)Maduthuri Venkatesh Address of Applicant :House no: 54-3-22, ramalayam street, Isukathota, Visakhapatnam Andhra Pradesh India 2)Dr.Vanthala Varaha Siva Prasad 3)Dr.Injeti N Niranjan Kumar 4)Teegala Hadassah 5)Dr. Beera Satish Ben 6)Dr. Beera Avinash Ben 7)M.V. Krishna Mohan 8)Palivela Yeshwanth Kumar 9)Kokkiri Hima Bindu 10)Marla Vikranth
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Maduthuri Venkatesh 2)Dr.Vanthala Varaha Siva Prasad 3)Dr.Injeti N Niranjan Kumar 4)Teegala Hadassah 5)Dr. Beera Satish Ben 6)Dr. Beera Avinash Ben 7)M.V. Krishna Mohan 8)Palivela Yeshwanth Kumar 9)Kokkiri Hima Bindu 10)Marla Vikranth
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This invention relates to the design of high surface area electrode contours with fin-like structures made up of commercial-grade, affordable aluminium metal/ alloy. The developed alloy is coated with a thick layer of a copper material system, specifically cuprous oxides, with added additives to mitigate marine environments' fouling phenomena. The electrode has entailed a significant decrease in ion release times in the water systems. For particulars on the invention, refer to the claims and drawings section.

No. of Pages : 19 No. of Claims : 10