

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011026267 A

(19) INDIA

(22) Date of filing of Application :22/06/2020

(43) Publication Date : 24/12/2021

(54) Title of the invention : METHOD AND SYSTEM FOR SECURE TRANSMISSION OF DATA IN UNDERWATER NETWORK

(51) International classification	:H04L0029060000, H04L0009320000, H04W0088040000, H04W0040320000, H04L0029080000	(71) <b>Name of Applicant :</b> <b>1)Chitkara Innovation Incubator Foundation</b> Address of Applicant :SCO: 160-161, Sector - 9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India
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Filing Date	:NA	<b>4)AWASTHI, Lalit Kumar</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a method for secure transmission of data through a network, the method comprising: receiving an authentication request encrypted by a first generated encryption factor, from each of the cluster head nodes (104), each of the cluster head nodes configured to receive data from sensor nodes (102); receiving a hash value signed with the first generated encryption factor; decrypting for each of the gateway nodes (106) the authentication request from the at least one of the cluster head nodes (104) operatively coupled to it using a second generated encryption factor, wherein each of the gateway nodes is configured to generate an authentication confirmation signal; receiving data from the at least one cluster head node, wherein the data from the at least one cluster head node is transmitted to a base station (108) to determine the integrity of the received data based on the hash value.

No. of Pages : 25 No. of Claims : 7