

ABSTRACT

To improve a communication system including two communication apparatuses so as to reduce a possibility of having communication decrypted by a third party. The

5 communication system includes a first communication apparatus and a second communication apparatus, where one of the communication apparatuses encrypts transmission subject data and transmits generated encrypted data to the other communication apparatus which decrypts received encrypted data. Each of the communication apparatuses generates an algorithm used for encryption each time it performs the encryption or decryption.

10 In this case, each of the communication apparatuses generates the algorithm by assigning past solutions to a solution generating algorithm capable of having the past solutions assigned thereto and thereby generating a new algorithm. The past solutions are erased when they are no longer used.