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(71) Applicant: **NTI, Inc.**, Yokkaichi-shi, Mie (JP)

(72) Inventor: **Takatoshi NAKAMURA**, Tokyo (JP)

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ABSTRACT

A secure technology for allowing two communication devices intending to execute encrypted communication to have a common initial solution. A large number of user devices all have a function of generating the same solution under the same condition when the user devices have the same initial solution, and can execute encrypted communication through use of a synchronized solution successively generated from the same initial solution. Each of two server devices generates synchronization information which is not the initial solution itself and which is required by the two user devices intending to execute the communication to generate the same initial solution, and transmits the synchronization information to the two user devices each of which executes predetermined calculation on the two pieces of synchronization information, to thereby generate the same initial solution. After that, the two user devices execute the encrypted communication based on the same initial solution.

