

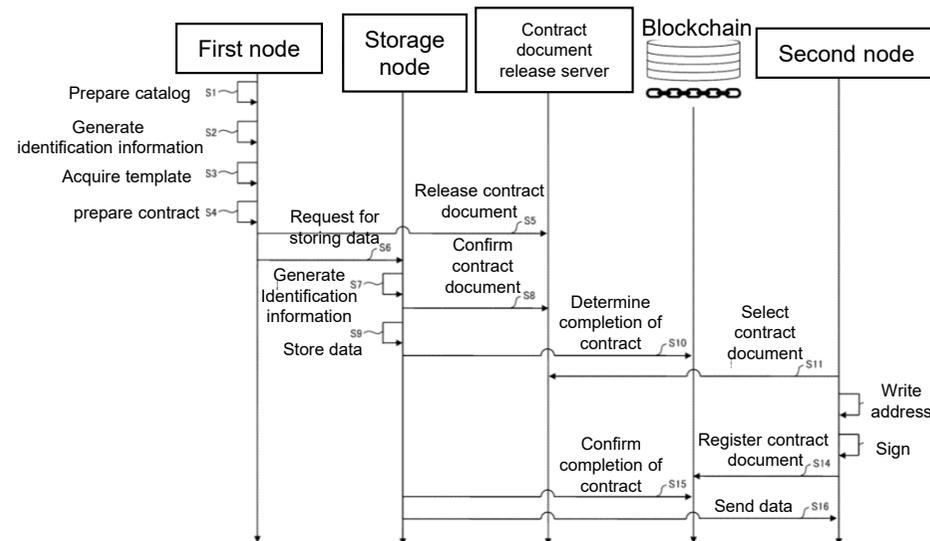
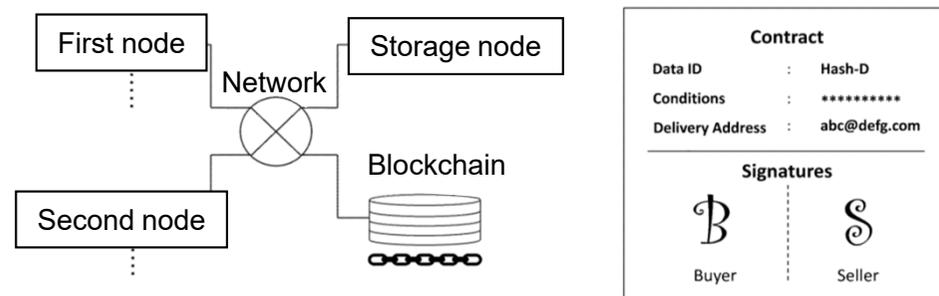
Information processing system safely to realize transaction of confidential data

The system enables buyer to receive data even when seller is offline

Summary

The smart contract is one of applications of the blockchain technology which realizes transaction of confidential data. The smart contract enables a seller directly to make a contract with a buyer. And when a contract to provide some confidential data is established between them, the seller him/herself needs to send it to the buyer. So the buyer cannot receive the data while the seller is offline. One approach for solving the problem is as follows: The seller stores the data on some cloud storage in advance, and then permits the buyer to download it only after the completion of the contract. In this case, the seller needs to tell the buyer which storage the data is stored in. However, one cannot include any information about the storage in the contract document because it opens to the public via the blockchain.

The information processing system we have invented enables buyer safely and automatically to receive confidential data even when seller is offline. Let us consider a situation that a seller has some confidential data and that a buyer makes a contract with the seller to get the data. In the situation, the system works as follows: First node (the seller) stores the data in Storage node. Then Second node (the buyer) write, in the contract document, an address to receive the data. The document including the address opens to the public, but no information about the storage where the data is stored does. When the contract is completed, the data is sent to the address by Storage node, and Second node can finally get it.



【Up left】 Overall view of the system
 【Up right】 Template for contract document
 【Down】 Sequence diagram illustrating the process for providing data

Application

- Digital currency transaction
- Direct transaction between buyer and seller without any intermediary

Patent Data Sheet

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