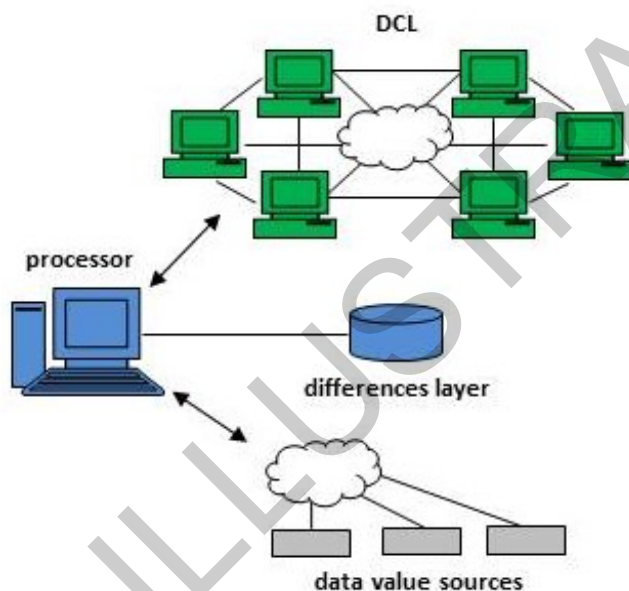


## SUMMARY DATA

- **U.S. Patent No.:** 10,025,797
- **Title:** Method and System for Separating Storage and Process of a Computerized Ledger for Improved Function
- **Inventor:** Jack Fonss
- **Filed:** March 16, 2018; February 23, 2018 priority (provisional application)
- **Issued:** July 17, 2018; first-office-action allowance
- **Claims:** 20; 3 independent (1 method, 1 system, 1 Beauregard)

## TECHNOLOGY OVERVIEW

'797 teaches technology for extending the capabilities of traditional distributed computerized ledgers ("DCLs") such as blockchains. The invention addresses a number of failings of traditional DCLs, such as transaction processing speed, data storage limitations, and security issues raised through methods incorporated into DCLs (e.g., conventional smart contracts). By addressing the failings of the prior art, the invention extends DCLs, making them suitable for industries and applications for which they were previously unsuitable or cumbersome.



Mr. Fonss recognized that transactions within a DCL can be independent and separately processed from the data items required to specify a value, disposition, distribution, or resolution of a unit of the DCL. By separating the transaction processing methods and data from the DCL itself, the invention reduces the data requirements for the DCL, and thereby decreases the DCL consensus processing requirements.

This separation may be accomplished using electronically published data that is exogenous to the DCL but related to the DCL record (e.g., package tracking information, commodity price information, relevant news). This data feed is connected to a processor that processes the time-sequenced data to determine differences over time and links the processed data to the appropriate DCL records. The linked data and associated processes may be stored in a data layer separate from the DCL (which may be centralized or decentralized, and secured

separate from the DCL). Only those items required for transaction record keeping are maintained in the DCL. This reduces the data burden on the DCL—and thereby the consensus-processing burden. This also reduces the security and privacy concerns posed by exposing processing code and sensitive transaction details in the DCL. Thus, the invention enables faster processing of transactions (enabling a far higher transaction rate than what is currently supported by traditional DCLs). And the invention extends DCL functionality without exposing the DCL to security threats that are inherent to exposing methods on the DCL.

**POTENTIAL USE CASES AND VALUES**

The invention is widely applicable across various industries. For example,

- **Financial Services:** Efficient and secure DCLs can enable new financial products and reduce the cost of existing services. The cost-savings value for the securitization market alone could be in the \$10s of billions annually.
- **Supply Chain Management:** Efficient and secure DCLs can reduce the cost and improve the accuracy of materials and inventory control. The cost-savings value of a transport-control implementation alone could be on the order of \$180 billion/year globally. Provenance/counterfeiting benefits enabled by such DCLs could also reach in the \$100s of billions annually.
- **Public Health:** Efficient and secure DCLs can reduce the cost and improve the efficacy of proving and deploying public health resources such as pharmaceuticals and medical devices. Healthcare spending in the US was approaching 20% of GDP (~\$3.5 trillion/year)—before the SARS-CoV-2 pandemic, so the potential for savings is enormous.