The United States of America



Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

David J. Kypos

Director of the United States Patent and Trademark Office



(12) United States Patent Wall et al.

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(54) SYSTEM, METHOD AND COMPUTING DEVICE FOR DETECTING DUPLICATE FINANCIAL DOCUMENTS

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 411 days.

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See application file for complete search history.

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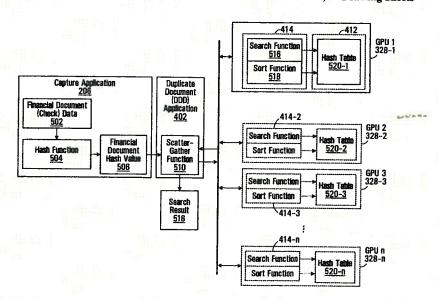
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(57)**ABSTRACT**

A method and system are disclosed for identifying in real time duplicate financial documents processed by a financial institution or check clearinghouse. A collection of hash values representative of previously processed financial documents are maintained in a memory, such as a GPU memory. When a new financial document enters the financial institution or check clearinghouse for processing, one or more features of the financial document are captured. A hash value is generated from the one or more features of the financial document. A search is performed in the collection of hash values for a matching hash value. If a match is found, a potential fraudulent event or operational error may be indicated. If a match is not found, the hash value representative of the new financial document is added to the collection of hash values.

27 Claims, 14 Drawing Sheets



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