



US010296880B2

(12) **United States Patent**  
**Miller**

(10) **Patent No.:** **US 10,296,880 B2**

(45) **Date of Patent:** **May 21, 2019**

- (54) **INVOICE ANALYTICS SYSTEM** 2003/0115080 A1\* 6/2003 Kasravi ..... G06F 17/27  
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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 0 days. 2012/0053987 A1 3/2012 Satyavolu et al.
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(21) Appl. No.: **15/817,353**

(22) Filed: **Nov. 20, 2017**

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(65) **Prior Publication Data**  
US 2018/0144314 A1 May 24, 2018

International business machines investor briefing—final. (May 9, 2012). Fair Disclosure Wire. (Year: 2012).\*

**Related U.S. Application Data**

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(60) Provisional application No. 62/424,559, filed on Nov. 21, 2016.

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(51) **Int. Cl.**  
**G06Q 20/00** (2012.01)  
**G06Q 20/14** (2012.01)  
**G06Q 20/40** (2012.01)  
**G06F 3/0482** (2013.01)  
**G06Q 10/04** (2012.01)

(57) **ABSTRACT**

A method and an invoice analytics system (IAS) for analyzing an entity's business service transactional invoice data (BSTID) and performing invoice analytics (IA) in real time are provided. The IAS extracts contract line item (CLI) data from contracts and stores the CLI data in a CLI database. The IAS transforms the CLI data into a quick view format and generates a contract quick view interface that displays the CLI data on an entity device. The IAS extracts and segments invoice line item (ILI) data from aggregated BSTID, stores the ILI data in an ILI database, and reconciles the invoices in accordance with the contracts by identifying and rectifying errors and off-contract business service items. The IAS performs IA on the ILI data for computing cost savings and generates an interactive, dynamic, and searchable IA report including graphical data representations of purchase patterns, outliers, variations, and predictive analytics for the entity.

(52) **U.S. Cl.**  
CPC ..... **G06Q 20/14** (2013.01); **G06Q 20/405** (2013.01); **G06F 3/0482** (2013.01); **G06Q 10/04** (2013.01)

(58) **Field of Classification Search**  
None  
See application file for complete search history.

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**17 Claims, 67 Drawing Sheets**

