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Accardo et al.

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(54) **ASSET-DATA INTEGRATION**

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(60) Provisional application No. 62/147,169, filed on Apr. 14, 2015.

(51) **Int. Cl.**
G06F 17/30 (2006.01)
G06F 16/25 (2019.01)

(52) **U.S. Cl.**
CPC *G06F 16/258* (2019.01)

(58) **Field of Classification Search**
CPC G06F 16/258
USPC 707/600–899
See application file for complete search history.

(56) **References Cited**

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(57) **ABSTRACT**

There is provided a system including a processor and a memory, storing an asset-data synthesis unit having a data translation module and a data integration module. The processor executes the asset-data synthesis unit to receive a first and a second domain specific asset description data being expressed using different descriptive vocabularies, translate the first and second domain specific asset description data to a common descriptive vocabulary to produce respective first and second common format asset description data, inferentially identify based on probabilistic inference that the first and second common format asset description data describe a same asset, integrate the first and second common format asset description data to produce an integrated asset description data describing the same asset, and generate a synthesized data describing the same asset and linking the integrated asset description data and the first and second domain specific asset description data.

20 Claims, 3 Drawing Sheets

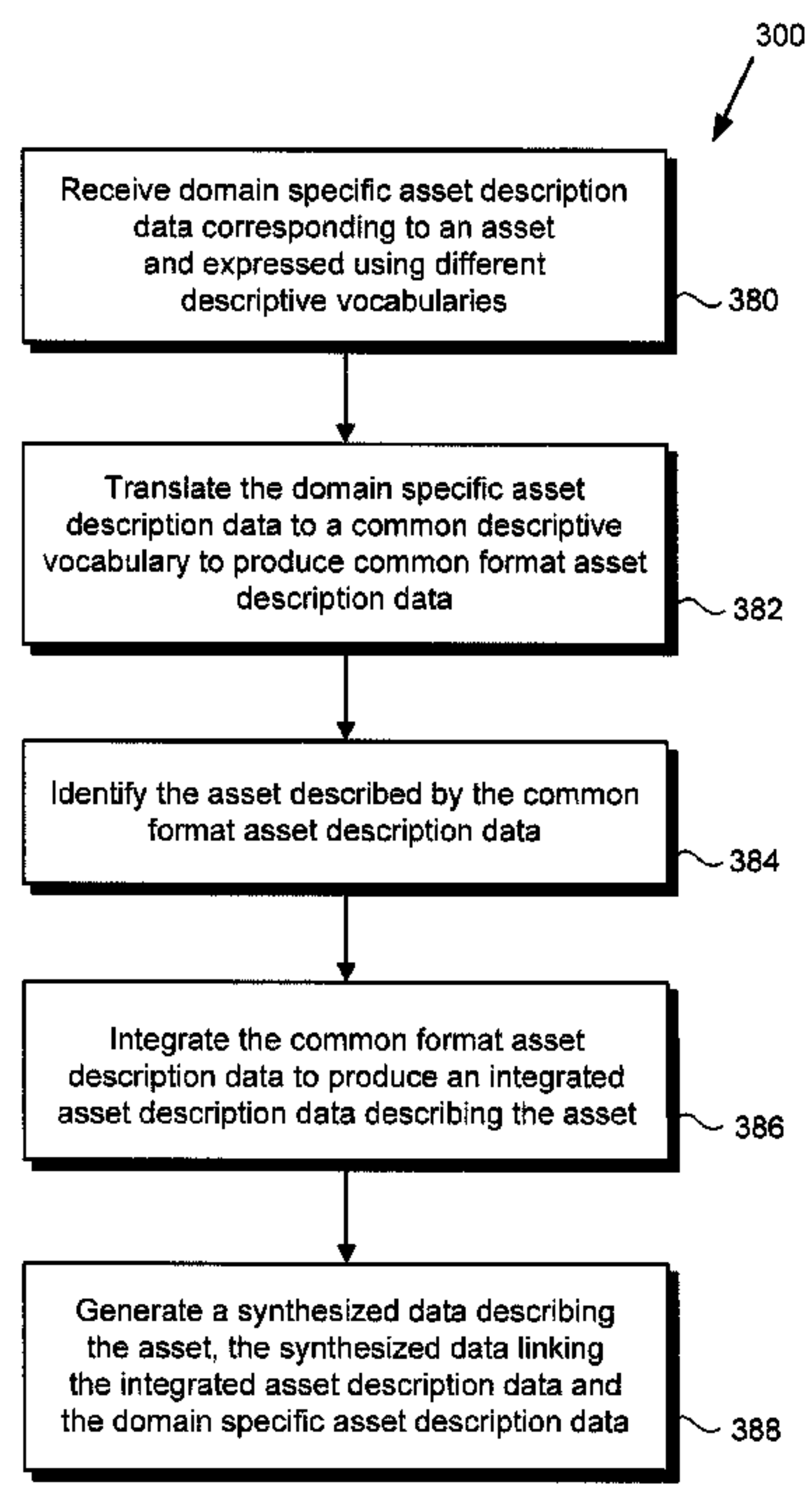
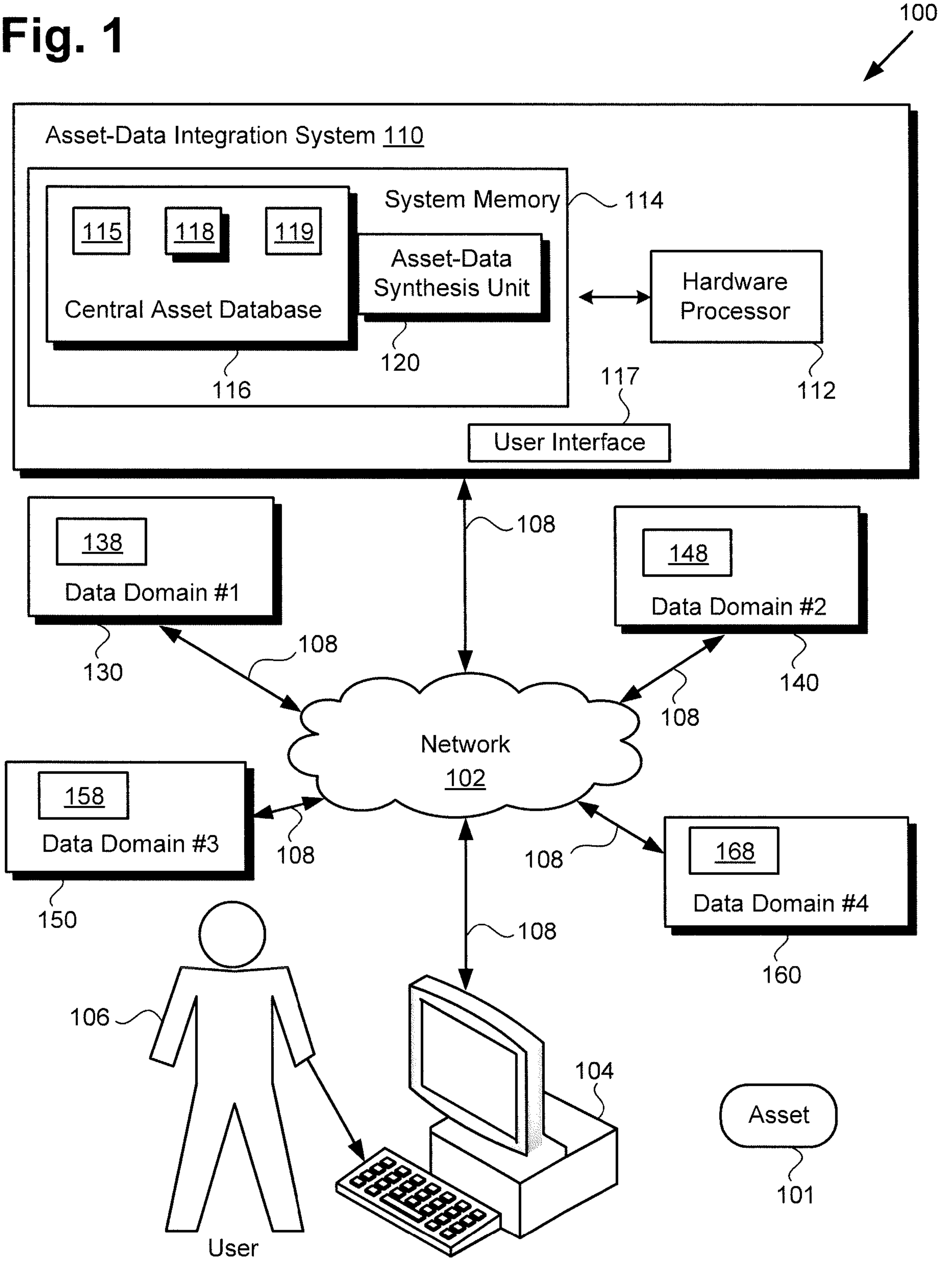


Fig. 1


100
Asset-Data Integration System 110
System Memory
114
115
118
119
Central Asset Database
Asset-Data Synthesis Unit
120
116
Hardware Processor
112
117
User Interface
108
138
Data Domain #1
130
148
Data Domain #2
140
Network
102
158
Data Domain #3
150
168
Data Domain #4
160
106
User
104
Asset
101

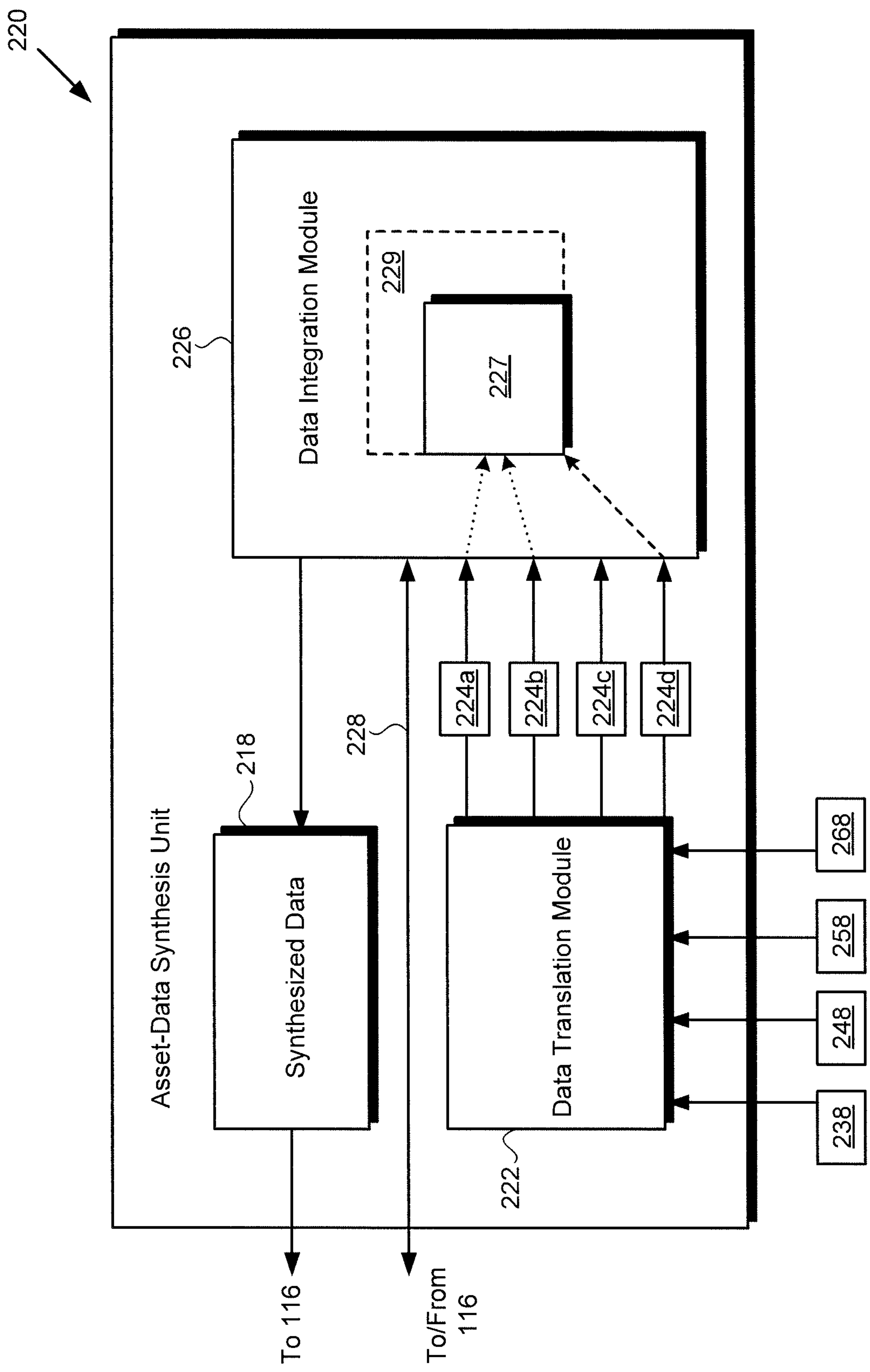
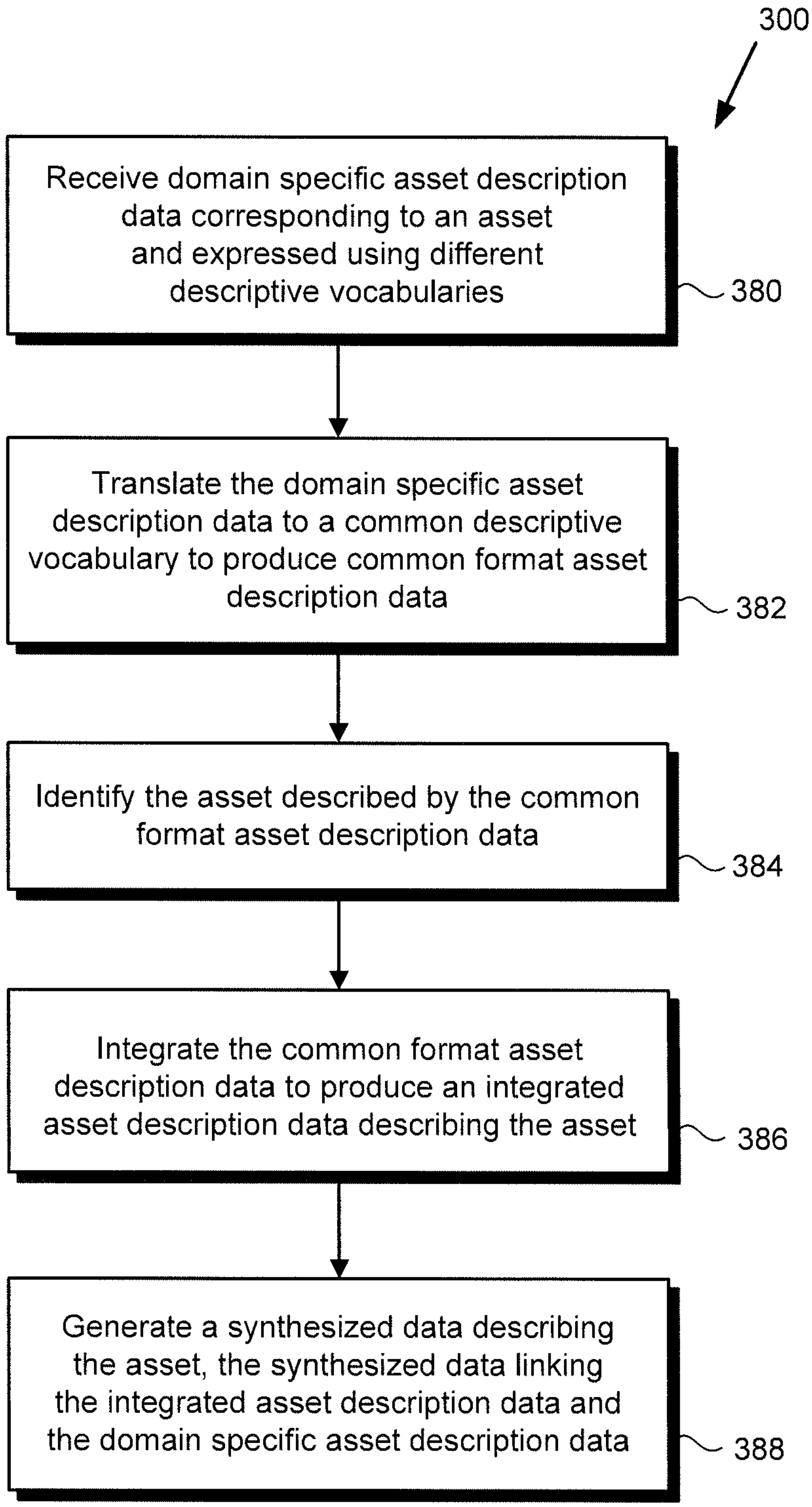

220
Asset-Data Synthesis Unit
Data Integration Module
226
229
227
Synthesized Data
218
228
224a
224b
224c
224d
Data Translation Module
222
268
258
248
238
To 116
To/From 116

Fig. 2

Fig. 3


300
Receive domain specific asset description data corresponding to an asset and expressed using different descriptive vocabularies
380
Translate the domain specific asset description data to a common descriptive vocabulary to produce common format asset description data
382
Identify the asset described by the common format asset description data
384
Integrate the common format asset description data to produce an integrated asset description data describing the asset
386
Generate a synthesized data describing the asset, the synthesized data linking the integrated asset description data and the domain specific asset description data
388

ASSET-DATA INTEGRATION

RELATED APPLICATION(S)

The present application is a Continuation of U.S. application Ser. No. 14/815,677, filed Jul. 31, 2015, which claims the benefit of and priority to a Provisional Patent Application Ser. No. 62/147,169, filed Apr. 14, 2015, and titled "Conceptual Named Resource Gateway," which is hereby incorporated fully by reference into the present application.

BACKGROUND

Asset classification and metadata governance systems have traditionally been structured as hierarchical taxonomies. Because such traditionally structured systems are static and fail to allow for dynamic data models, users of those systems typically encounter significant problems in terms of asset categorization, organization, and retrieval. Although the limitations imposed by these hierarchically structured taxonomies may be tolerable for a single data repository used in isolation, problems may become intractable when attempting to govern data across multiple independent data domains. For example, it becomes difficult and in some instances impracticable to resolve unique asset identifiers across systems and to govern vocabulary across the various domains.

SUMMARY

There are provided asset-data integration systems and methods, substantially as shown in and/or described in connection with at least one of the figures, and as set forth more completely in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** shows a diagram of one exemplary implementation of an asset-data integration system;

FIG. **2** shows a more detailed representation of an asset-data synthesis unit suitable for use in the asset-data integration system of FIG. **1**, according to one exemplary implementation; and

FIG. **3** is a flowchart presenting an exemplary method for use by an asset-data integration system.

DETAILED DESCRIPTION

The following description contains specific information pertaining to implementations in the present disclosure. One skilled in the art will recognize that the present disclosure may be implemented in a manner different from that specifically discussed herein. The drawings in the present application and their accompanying detailed description are directed to merely exemplary implementations. Unless noted otherwise, like or corresponding elements among the figures may be indicated by like or corresponding reference numerals. Moreover, the drawings and illustrations in the present application are generally not to scale, and are not intended to correspond to actual relative dimensions.

The present application describes systems and methods for ontologically organizing data entries corresponding to an asset, i.e., substantially the same asset, across multiple data domains, several or all of which may employ distinct descriptive vocabularies and organizational formats. As a result, the solutions disclosed in the present application provide systems and methods for identifying data corre-

sponding to an asset (hereinafter "asset description data" or "asset-data") but residing in separate data domains structured as hierarchical taxonomies. In addition, the solutions disclosed in the present application include transforming that asset description data into a semantic ontology capable of governing and searching across all of the separate data domains. Moreover, the present systems and methods may be configured to provide the ontological transformation and search functionality in real-time.

For example, the systems and methods disclosed herein may begin by generating a conceptual nomenclature defining concepts at an abstract level that will ultimately govern the asset description data and the transformed asset description data, and to create vocabularies that can be used to describe the asset description data and the transformed asset description data. The conceptual nomenclature is determined and managed in an asset-data integration system that includes an asset-data synthesis unit. The asset-data synthesis unit defines the ontological ecosystem within which the asset description data and the transformed asset description data resides.

As a result, the systems and methods disclosed in the present application can provide a powerful tool for identifying and aggregating asset description data from disparate data domains using a single search strategy and a common, consolidated descriptive vocabulary. It is noted that the systems and methods disclosed in the present application may be utilized to search across many independent data domains for asset description data corresponding to a wide variety of assets. For example, as used in the present application, the term "asset" may refer to tangible things such as persons or objects, or to intangible assets, such as intellectual property or data. Additional specific examples of assets to which the present inventive concepts may apply include persons, organizations, media content, such as television (TV) content, movies, games, and music content, real or personal property holdings, vacation packages, and theme park attractions, to name a few.

Referring to FIG. **1**, FIG. **1** shows a diagram of one exemplary implementation of an asset-data integration system. As shown in FIG. **1**, asset-data integration system **110** is utilized in communications environment **100**, and includes hardware processor **112**, system memory **114**, and user interface **117**. System memory **114** has asset-data synthesis unit **120** and central asset database **116** including synthesized data **118** stored therein. In addition, central asset database **116** is shown to store database entries **115** and **119**, either or both of which may be synthesized data analogous to synthesized data **118**, for example.

As further shown in FIG. **1**, communication environment **100** also includes network **102** interactively linking asset-data integration system **110** with first data domain **130**, second data domain **140**, third data domain **150**, fourth data domain **160**, and user system **104**, via network communication links **108**. Also shown in FIG. **1** are asset **101**, which may take the form of media content, for example, as well as first asset description data **138**, second asset description data **148**, third asset description data **158**, fourth asset description data **168**, and system user **106**. It is noted that any or all of first asset description data **138**, second asset description data **148**, third asset description data **158**, and fourth asset description data **168** may be in the form of metadata, for example.

It is noted that although FIG. **1** depicts asset-data synthesis unit **120** and central asset database **116** as being mutually co-located in system memory **114**, that representation is merely provided as an aid to conceptual clarity. More generally, asset-data integration system **110** may include one or more computing platforms, such as computer servers for example, which may be co-located, or may form an interactively linked but distributed system, such as a cloud based system, for instance. As a result, hardware processor **112** and system memory **114** may correspond to distributed processor and memory resources within asset-data integration system **110**. Thus, it is to be understood that asset-data synthesis unit **120** and central asset database **116** may be stored remotely from one another within the distributed memory resources of asset-data integration system **110**.

According to the implementation shown by FIG. **1**, system user **106** may utilize user system **104** to interact with asset-data integration system **110** over network **102**. In one such implementation, asset-data integration system **110** may correspond to one or more web servers, accessible over a packet network such as the Internet, for example. Alternatively, asset-data integration system **110** may correspond to one or more computer servers supporting a local area network (LAN), or included in another type of limited distribution network. It is noted that although user system **104** is shown as a personal computer (PC) in FIG. **1**, that representation is also provided merely as an example. In other implementations, user system **104** may be any other suitable mobile or stationary computing device or system.

Continuing to FIG. **2**, FIG. **2** shows a more detailed representation of asset-data synthesis unit **220** suitable for use in asset-data integration system **110** in FIG. **1**, according to one exemplary implementation. As shown in FIG. **2**, asset-data synthesis unit **220** includes data translation module **222** configured to receive some or all of first asset description data **238**, second asset description data **248**, third asset description data **258**, and fourth asset description data **268**. As further shown in FIG. **2**, asset-data synthesis unit **220** also includes data integration module **226** configured to receive some or all of first common format asset description data **224***a*, second common format asset description data **224***b*, third common format asset description data **224***c*, and fourth common format asset description data **224***d* produced by data translation module **222**.

Also shown in FIG. **2** are integrated asset description data **227**, synthesized data **218**, reintegrated asset description data **229**, and communication link **228** representing ongoing communication between data integration module **226** and central asset database **116**, in FIG. **1**. Asset data synthesis unit **220** and synthesized data **218** generated by asset data synthesis unit **220**, in FIG. **2**, correspond respectively in general to asset data synthesis unit **120** and synthesized data **118**, in FIG. **1**, and may share any of the characteristics attributed to those corresponding features in the present application. In addition, first asset description data **238**, second asset description data **248**, third asset description data **258**, and fourth asset description data **268**, correspond respectively in general to first asset description data **138**, second asset description data **148**, third asset description data **158**, and fourth asset description data **168**, in FIG. **1**, and may share any of the characteristics attributed to those corresponding features in the present application.

FIGS. **1** and **2** will now be further described by reference to FIG. **3**, which presents flowchart **300** describing an exemplary method for use by an asset-data integration system. With respect to the method outlined in FIG. **3**, it is noted that certain details and features have been left out of flowchart **300** in order not to obscure the discussion of the inventive features in the present application.

Referring to FIG. **3** in combination with FIGS. **1** and **2**, flowchart **300** begins with receiving domain specific asset description data corresponding to asset **101** and expressed using different descriptive vocabularies (action **380**). Hardware processor **112** of asset-data integration system **110** may be configured to execute asset-data synthesis unit **120**/**220** to receive asset description data corresponding to asset **101** over network **102**. That asset description data may take the form of any or all of first asset description data **138**/**238** provided by first data domain **130**, second asset description data **148**/**248** provided by second data domain **140**, third asset description data **158**/**258** provided by third data domain **150**, and fourth asset description data **168**/**268** provided by fourth data domain **160**.

First data domain **130**, second data domain **140**, third data domain **150**, and fourth data domain **160** may be structured as traditional hierarchical taxonomies, for example. Moreover, because first data domain **130**, second data domain **140**, third data domain **150**, and fourth data domain **160** are independent of one another, first asset description data **138**/**238**, second asset description data **148**/**248**, third asset description data **158**/**258**, and fourth asset description data **168**/**268** may be domain specific asset description data. That is to say, each of respective first asset description data **138**/**238**, second asset description data **148**/**248**, third asset description data **158**/**258**, and fourth asset description data **168**/**268** may be expressed using a different descriptive vocabulary specific to the respective data domain in which it resides.

Flowchart **300** continues with translating the domain specific asset description data to a common descriptive vocabulary to produce common format asset description data (action **382**). For example, asset-data integration system **110** may be configured to utilize asset-data synthesis unit **120**/**220** to normalize the domain specific asset description data received from first data domain **130** and/or second data domain **140** and/or third data domain **150** and/or fourth data domain **160**. Thus, hardware processor **112** may be further configured to execute asset-data synthesis unit **120**/**220** to translate first asset description data **138**/**238** and/or second asset description data **148**/**248** and/or third asset description data **158**/**258** and/or fourth asset description data **168**/**268** to a common descriptive vocabulary.

One example of such a process uses a canonical data model (CDM) as a common reference for translating first asset description data **138**/**238** and/or second asset description data **148**/**248** and/or third asset description data **158**/**258** and/or fourth asset description data **168**/**268**. As shown in FIG. **2**, translation of first asset description data **138**/**238** and/or second asset description data **148**/**248** and/or third asset description data **158**/**258** and/or fourth asset description data **168**/**268** may be performed using data translation module **222** of asset-data synthesis unit **120**/**220**.

As further shown in FIG. **2**, data translation module **222** may be configured to produce first common format asset description data **224***a* through translation of first asset description data **138**/**238**, as well as second common format asset description data **224***b* through translation of second asset description data **148**/**248**. In addition, data translation module **222** may be configured to produce third common format asset description data **224***c* through translation of third asset description data **158**/**258**, and to produce fourth common format asset description data **224***d* through translation of fourth asset description data **168**/**268**.

Flowchart **300** continues with identifying an asset described by the common format asset description data (action **384**). Hardware processor **112** may be configured to execute asset-data synthesis unit **120**/**220** to identify some or all of first common format asset description data **224***a*, second common format asset description data **224***b*, third common format asset description data **224***c*, and fourth common format asset description data **224***d* as describing the same asset, e.g., asset **101**. For example, asset-data synthesis unit **120/220** may identify first common format asset description data **224***a* and second common format asset description data **224***b* as describing asset **101**, but may identify third common format asset description data **224***c* as describing another asset.

In some implementations, asset-data synthesis unit **120/220** may be configured to identify first common format asset description data **224***a* and second common format asset description data **224***b* as describing asset **101** inferentially. Such inferencing, when performed using asset-data synthesis unit **120/220** may be absolute or probabilistic. For example, in implementations in which asset-data synthesis unit **120/220** performs only absolute inferencing, the inferential identification of asset **101** based on first common format asset description data **224***a* and second common format asset description data **224***b* may only occur where the likelihood of accuracy is substantially one hundred percent. However, in some implementations, it may be advantageous or desirable to enable probabilistic inferencing by asset-data synthesis unit **120/220**.

In those latter implementations, asset-data synthesis unit **120/220** may be configured to infer that asset **101** is the asset being described by both first common format asset description data **224***a* and second common format asset description data **224***b* when the likelihood of accuracy meets or exceeds a confidence threshold of less than one hundred percent. Moreover, in some implementations, asset-data synthesis unit **120/220** may be configured to have machine learning capabilities, thereby enabling the knowledge base used by asset-data synthesis unit **120/220** to inferentially identify asset **101** to evolve over time.

Flowchart **300** continues with integrating the common format asset description data to produce an integrated asset description data describing asset **101** (action **386**). For example, according to the exemplary use case described above, asset-data synthesis unit **120/220** may identify first common format asset description data **224***a* and second common format asset description data **224***b* as describing asset **101**. In that case, hardware processor **112** may be further configured to execute asset-data synthesis unit **120/220** to utilize data integration module **226** to integrate first common format asset description data **224***a* and second common format asset description data **224***b* to produce integrated asset description data **227** describing asset **101**.

For example, first common format asset description data **224***a* and second common format asset description data **224***b* may be recreated into a graphical representation. Such a graphical representation may take the form of a consolidated graph corresponding to the attributes of asset **101** described by first common format asset description data **224***a* and second common format asset description data **224***b*. The graphical representation may be semantic, meaning it may contain new data based on relationships between first common format asset description data **224***a* and second common format asset description data **224***b*. That new data is a product of the ontology logic employed by data integration module **226**.

Flowchart **300** can conclude with generating synthesized data **118/218** describing asset **101** (action **388**). Hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to generate synthesized data **118/218** describing asset **101**, such that synthesized data **118/218** links integrated asset description data **227** and first and second domain specific asset description data **138/238** and **148/248**. Furthermore, hardware processor **112** may also be configured to execute asset-data synthesis unit **120/220** to store synthesized data **118/218** in central asset database **116**.

Although not shown in flowchart **300**, in some implementations the systems and methods disclosed in the present application can include use of user interface **117** by asset-data integration system **110** to display synthesized data **118/218** linking integrated asset description data **227** and first and second domain specific asset description data **138/238** and **148/248** to system user **106**. In cases where system user **106** is an authorized knowledge base manager of asset-data integration system **110**, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to solicit confirmation data regarding synthesized data **118/218** from system user **106**. Moreover, in one implementation, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to modify synthesized data **118/218** based on an asset correction data received through user interface **117**.

As noted above, asset-data integration system **110** can provide a powerful tool for identifying and aggregating asset description data from disparate data domains using a single search strategy and a common, consolidated descriptive vocabulary. As a result, hardware processor **112** may be further configured to execute asset-data synthesis unit **120/220** to receive an asset search data describing multiple asset attributes through user interface **117**, and to search central asset database **116** for at least one database entry corresponding to the search data. Where one or more of the asset attributes described by the search data are included in synthesized data **118/218**, for example, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to determine that asset **101** corresponds to the search data, and to identify asset **101** to system user **106**. In addition, or alternatively, where one or more of the asset attributes described by the search data are included in synthesized data **118/218**, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to display synthesized data **118/218** to system user **106**, via user interface **117**.

It is noted that asset-data integration system **110** may be configured to dynamically update synthesized data **118/218** based on additional asset description data corresponding to asset **101** and received by asset-data integration system **110** after generation of synthesized data **118/218**. For example, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to receive another domain specific asset description data, which may be expressed using another descriptive vocabulary, e.g., fourth asset description data **168/268**, and to translate fourth asset description data **168/268** to produce fourth common format asset description data **224***d*.

Hardware processor **112** may be further configured to execute asset-data synthesis unit **120/220** to identify fourth common format asset description data **224***d* as describing asset **101**, and to integrate fourth common format asset description data **224***d* with integrated asset description data **227** to produce reintegrated asset description data **229**. In addition, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to update synthesized data **118/218** describing asset **101** to link reintegrated asset description data **229** with first and second domain specific asset description data **138/238** and **148/248**, and fourth domain specific asset description data **168/268**.

As noted above, asset-data synthesis unit **120/220** is configured to define the governing ontology by which the asset description data and the transformed asset description data are organized. In some implementations, that governing ontology may be designed to evolve in response to production of reintegrated asset description data **229** and/or updating of synthesized data **118/218**. For example, in those implementations, hardware processor **112** may be configured to execute asset-data synthesis unit **120/220** to extend or otherwise modify the governing ontology to incorporate one or more new conceptual relationships identified in the process of producing reintegrated asset description data **229** and/or updating synthesized data **118/218**.

Furthermore, in some implementations, the extension of or modification to the governing ontology defined by asset-data synthesis unit **120/220** may be automatically propagated to database entries stored in central asset database **116**. In other words, the production of reintegrated asset description data **229** and/or the updating of synthesized data **118** may trigger a modification to the governing ontology defined and imposed by asset-data synthesis unit **120/220** that may in turn cause database entries **115** and/or **119** to be correspondingly updated automatically.

Thus, the asset-data integration solution disclosed in the present application is configured to ontologically organize data entries corresponding to the same asset across multiple data domains, several or all of which may employ distinct descriptive vocabularies and organizational formats. As a result, the solution disclosed in the present application provides systems and methods for identifying asset description data corresponding to the same asset but residing in separate data domains structured as hierarchical taxonomies. In addition, the solution disclosed in the present application includes transforming that asset description data into a semantic ontology capable of governing and searching across all of the separate data domains. Moreover, the present systems and methods are configured to provide that ontological transformation and search functionality in real-time. Moreover, the systems and methods disclosed in the present application may be utilized to search across independent data domains for asset description data corresponding to a wide variety of assets. For example, assets to which the present inventive concepts may apply include persons, organizations, media content, such as TV content, movies, games, and music content, real or personal property holdings, vacation packages, and theme park attractions, to name a few.

From the above description it is manifest that various techniques can be used for implementing the concepts described in the present application without departing from the scope of those concepts. Moreover, while the concepts have been described with specific reference to certain implementations, a person of ordinary skill in the art would recognize that changes can be made in form and detail without departing from the scope of those concepts. As such, the described implementations are to be considered in all respects as illustrative and not restrictive. It should also be understood that the present application is not limited to the particular implementations described herein, but many rearrangements, modifications, and substitutions are possible without departing from the scope of the present disclosure.

What is claimed is:

1. An asset-data integration system comprising:

a hardware processor and a system memory;

an asset-data synthesis unit stored in the system memory;

wherein the hardware processor is configured to execute the asset-data synthesis unit to:

receive a first domain specific asset description data and a second domain specific asset description data, the first domain specific asset description data and the second domain specific asset description data being expressed using different descriptive vocabularies;

translate the first domain specific asset description data and the second domain specific asset description data to a common descriptive vocabulary to produce a first common format asset description data and a second common format asset description data, respectively;

inferentially identify, based on probabilistic inference, that the first common format asset description data and the second common format asset description data describe a same asset;

integrate the first common format asset description data and the second common format asset description data to produce an integrated asset description data describing the same asset;

generate a synthesized data describing the same asset, the synthesized data linking the integrated asset description data, the first domain specific asset description data, and the second domain specific asset description data;

receive a third domain specific asset description data;

translate the third domain specific asset description data to the common descriptive vocabulary to produce a third common format asset description data;

inferentially identify, based on probabilistic inference, that the third common format asset description data describes the same asset;

integrate the third common format asset description data with the integrated asset description data to produce a re-integrated asset description data; and

update the synthesized data describing the same asset to link the re-integrated asset description data with the first domain specific asset description data, the second domain specific asset description data, and the third domain specific asset description data.

2. The asset-data integration system of claim **1**, wherein the hardware processor is further configured to execute the asset-data synthesis unit to display the synthesized data to a system user.

3. The asset-data integration system of claim **1**, wherein the hardware processor is further configured to execute the asset-data synthesis unit to modify the synthesized data based on an asset correction data received from a system user.

4. The asset-data integration system of claim **1**, wherein the hardware processor is further configured to execute the asset-data synthesis unit to modify a governing ontology defined by the asset-data synthesis unit based on at least one of the re-integrated asset description data or the synthesized data.

5. The asset-data integration system of claim **1**, further comprising a central asset database stored in the system memory, the hardware processor being further configured to execute the asset-data synthesis unit to store the synthesized data in the central asset database.

6. A method for use by an asset-data integration system having a hardware processor, the method comprising:

receiving, using the hardware processor, a first domain specific asset description data and a second domain specific asset description data, the first domain specific asset description data and the second domain specific asset description data being expressed using different descriptive vocabularies;

translating, using the hardware processor, the first domain specific asset description data and the second domain specific asset description data to a common descriptive vocabulary to produce a first common format asset description data and a second common format asset description data, respectively;

inferentially identifying, using the hardware processor, based on probabilistic inference, that the first common format asset description data and the second common format asset description data describe a same asset;

integrating, using the hardware processor, the first common format asset description data and the second common format asset description data to produce an integrated asset description data describing the same asset;

generating, using the hardware processor, a synthesized data describing the same asset, the synthesized data linking the integrated asset description data, the first domain specific asset description data, and the second domain specific asset description data;

receiving, using the hardware processor, a third domain specific asset description data;

translating, using the hardware processor, the third domain specific asset description data to the common descriptive vocabulary to produce a third common format asset description data;

inferentially identifying, using the hardware processor, based on probabilistic inference, that the third common format asset description data describes the same asset;

integrating, using the hardware processor, the third common format asset description data with the integrated asset description data to produce a re-integrated asset description data; and

updating, using the hardware processor, the synthesized data describing the same asset to link the re-integrated asset description data with the first domain specific asset description data, the second domain specific asset description data, and the third domain specific asset description data.

7. The method of claim **6**, further comprising displaying, using the hardware processor, the synthesized data to a system user.

8. The method of claim **6**, further comprising modifying, using the hardware processor, the synthesized data based on an asset correction data received from a system user.

9. The method of claim **6**, further comprising modifying, using the hardware processor, a governing ontology, based on at least one of the re-integrated asset description data or of the synthesized data.

10. The method of claim **6**, further comprising storing, using the hardware processor, the synthesized data in a central asset database of the asset-data integration system.

11. An asset-data integration system comprising:

a hardware processor configured to:

receive a first domain specific asset description data and a second domain specific asset description data, the first domain specific asset description data and the second domain specific asset description data being expressed using different descriptive vocabularies;

translate the first domain specific asset description data and the second domain specific asset description data to a common descriptive vocabulary to produce a first common format asset description data and a second common format asset description data, respectively;

determine that the first common format asset description data and the second common format asset description data describe a same asset;

integrate the first common format asset description data and the second common format asset description data to produce an integrated asset description data describing the same asset;

generate a synthesized data describing the same asset, the synthesized data linking the integrated asset description data, the first domain specific asset description data, and the second domain specific asset description data;

receive a third domain specific asset description data;

translate the third domain specific asset description data to the common descriptive vocabulary to produce a third common format asset description data;

determine that the third common format asset description data describes the same asset;

integrate the third common format asset description data with the integrated asset description data to produce a re-integrated asset description data; and

update the synthesized data describing the same asset to link the re-integrated asset description data with the first domain specific asset description data, the second domain specific asset description data, and the third domain specific asset description data.

12. The asset-data integration system of claim **11**, wherein the hardware processor is further configured to display the synthesized data to a system user.

13. The asset-data integration system of claim **11**, wherein the hardware processor is further configured to modify the synthesized data based on an asset correction data received from a system user.

14. The asset-data integration system of claim **11**, wherein the hardware processor is further configured to modify a governing ontology based on at least one of the re-integrated asset description data or the synthesized data.

15. The asset-data integration system of claim **11**, further comprising a central asset database stored in the system memory, wherein the hardware processor is further configured to store the synthesized data in the central asset database.

16. A method for use by an asset-data integration system having a hardware processor, the method comprising:

receiving, using the hardware processor, a first domain specific asset description data and a second domain specific asset description data, the first domain specific asset description data and the second domain specific asset description data being expressed using different descriptive vocabularies;

translating, using the hardware processor, the first domain specific asset description data and the second domain specific asset description data to a common descriptive vocabulary to produce a first common format asset description data and a second common format asset description data, respectively;

determining, using the hardware processor, that the first common format asset description data and the second common format asset description data describe a same asset;

integrating, using the hardware processor, the first common format asset description data and the second common format asset description data to produce an integrated asset description data describing the same asset;

generating, using the hardware processor, a synthesized data describing the same asset, the synthesized data linking the integrated asset description data, the first domain specific asset description data, and the second domain specific asset description data;

receiving, using the hardware processor, a third domain specific asset description data;

translating, using the hardware processor, the third domain specific asset description data to the common descriptive vocabulary to produce a third common format asset description data;

determining, using the hardware processor, that the third common format asset description data describes the same asset;

integrating, using the hardware processor, the third common format asset description data with the integrated asset description data to produce a re-integrated asset description data; and

updating, using the hardware processor, the synthesized data describing the same asset to link the re-integrated asset description data with the first domain specific asset description data, the second domain specific asset description data, and the third domain specific asset description data.

17. The method of claim **16**, further comprising displaying, using the hardware processor, the synthesized data to a system user.

18. The method of claim **16**, further comprising modifying, using the hardware processor, the synthesized data based on an asset correction data received from a system user.

19. The method of claim **16**, further comprising modifying, using the hardware processor, a governing ontology, based on at least one of the re-integrated asset description data or the synthesized data.

20. The method of claim **16**, further comprising storing, using the hardware processor, the synthesized data in a central asset database of the asset-data integration system.

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