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(54) CONCURRENT PERSONNEL ASSIGNMENTS

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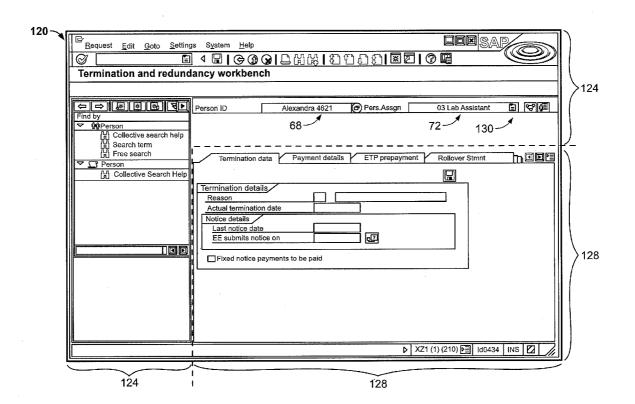
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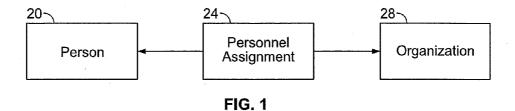
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(57) ABSTRACT

A data structure stored on a computer readable medium can include a person identifier associated with a person; a switch associated with the person identifier, a state of the switch having a possible first value indicating that there is not more than one personnel assignment associated with the person and a possible second value indicating that there are a plurality of personnel assignments associated with the person; and, if the state of the switch has the second value, a plurality of personnel assignment identifiers associated with the person identifier, each personnel assignment identifier identifying a respective personnel assignment associated with the person. The data structure can be operable to enable the performance of a business process related to the person, an organization, and at least one of the plurality of personnel assignments.





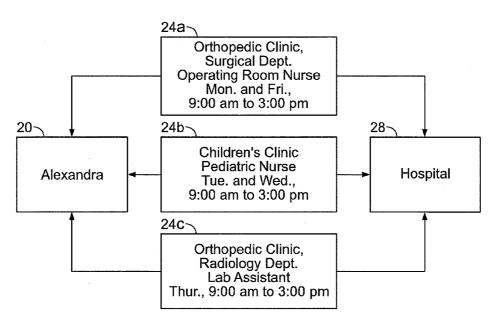
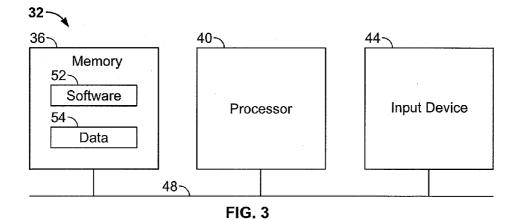


FIG. 2



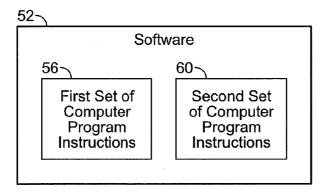


FIG. 4

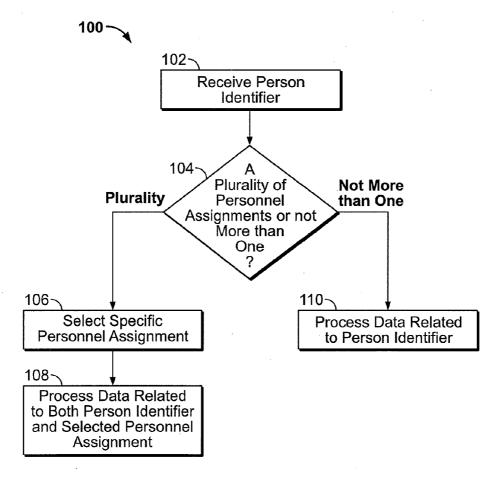


FIG. 5

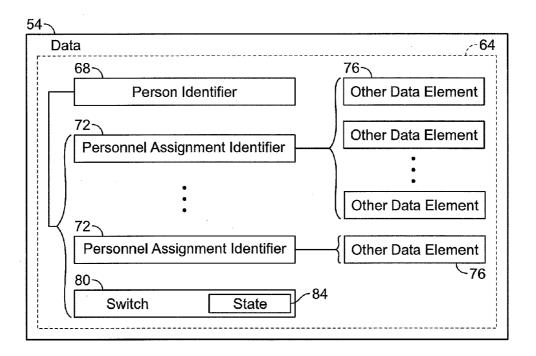
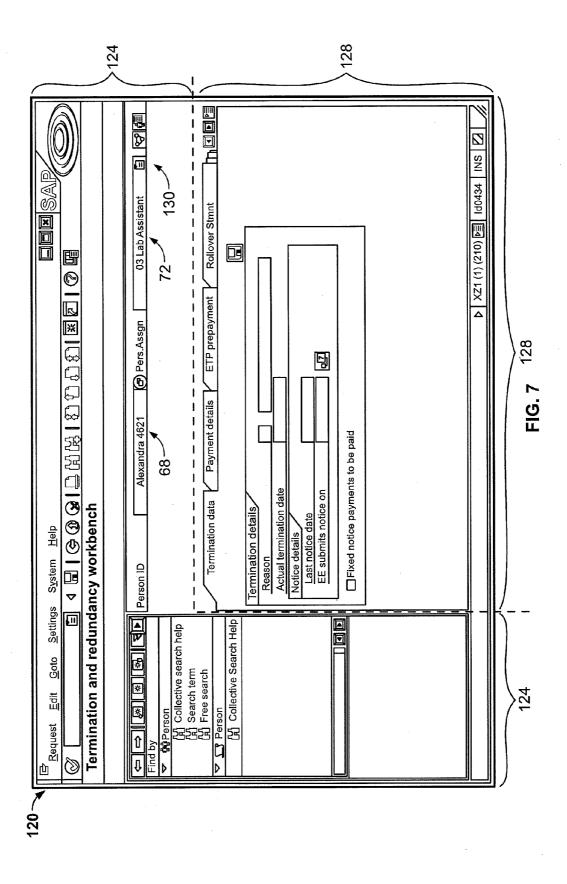
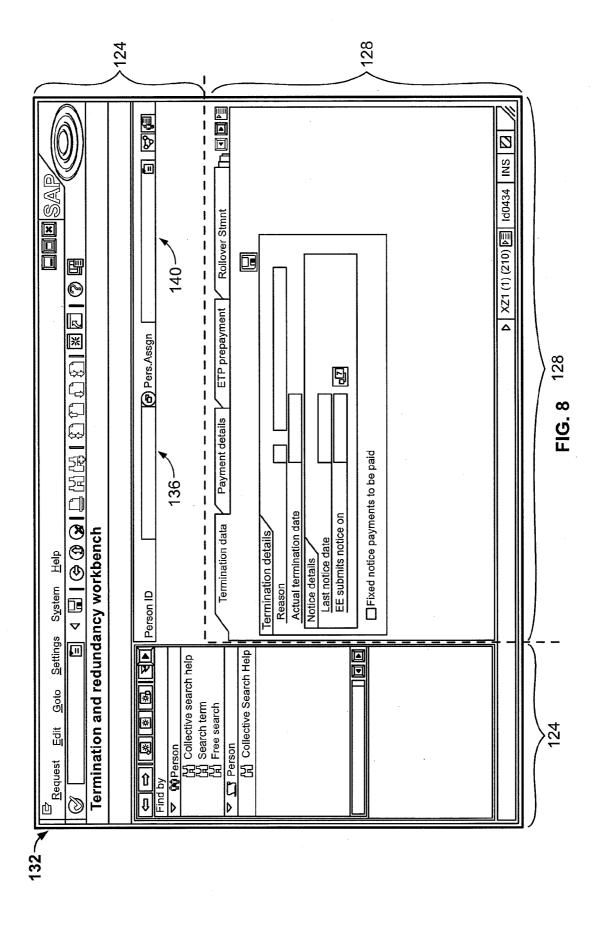


FIG. 6





CONCURRENT PERSONNEL ASSIGNMENTS

BACKGROUND INFORMATION

[0001] Organizations, such as for example companies, typically perform business processes related to people associated with them, such as for example employees. For example, an organization may wish to pay or terminate an employee. Generally speaking, the organization maintains data related to the person, and such business processes are performed with the aid of software within a computing environment. One way that organizations typically perform the business process comprises using the software to process the data related to the person. However, this typical way of performing the business process has disadvantages. For example, it may not be able to accommodate a complex relationship between the organization and the associated person, the complex relationship having aspects that the organization may not wish to involve in the business process.

BRIEF DESCRIPTION OF THE DRAWINGS

[0002] So that features of the present invention can be understood in detail, a description of the invention can be had by reference to embodiments, some of which are illustrated in the appended drawings. It is to be noted, however, that the appended drawings illustrate only typical embodiments of the invention and are therefore not to be considered limiting of its scope, for the invention may admit to other equally effective embodiments.

[0003] FIG. 1 depicts a schematic view of one embodiment of a personnel assignment between an organization and a person.

[0004] FIG. 2 depicts a schematic view of one embodiment of a plurality of concurrent personnel assignments between the organization and the person.

[0005] FIG. 3 depicts a schematic view of one embodiment of a computing environment.

[0006] FIG. 4 depicts a schematic view of one embodiment of a software of the computing environment depicted in FIG. 3.

[0007] FIG. 5 depicts a flow diagram of one embodiment of a method related to performing a business process involving the organization, the person and the plurality of concurrent personnel assignments.

[0008] FIG. 6 depicts one embodiment of a data structure. [0009] FIG. 7 depicts a representation of one embodiment of a first display comprising information related to the person and at least one of the plurality of concurrent personnel assignments.

[0010] FIG. 8 depicts a representation of one embodiment of a second display comprising a first search field related to a person identifier and a second search field related to a personnel assignment identifier.

[0011] Wherever possible, the same reference numbers are used in the drawings and the description to refer to the same or like parts.

DETAILED DESCRIPTION

[0012] Embodiments of the present invention are related to performing a business process involving an organization and an associated person having a plurality of concurrent personnel assignments with the organization. The organization comprises any organized group of people including, for example, a business, a company, an association, a non-profit organiza-

tion, a firm, or a loose affiliation of people. The organization can also be a portion of a larger organization, such as a particular group within a company, or a particular subsidiary of a larger overall company. The person comprises any person associated with the organization including, for example, an employee, a contractor, a volunteer, a member, or any other person that otherwise associates with the organization.

[0013] FIG. 1 depicts one embodiment of the personnel assignment 24 the person 20 has with the organization 28. The personnel assignment 24 at least partially defines a relationship between the organization 28 and the associated person 20 which, generally speaking, includes aspects of how the organization 28 and the associated person 20 interact. The personnel assignment 24 typically defines rules which govern the relationship between the organization 28 and the person 24 such as, for example, pay rate, taxation rate, benefits, start date, end date, requirements, expectations, deadlines, etc.

[0014] In one embodiment, the person 20 has a plurality of concurrent personnel assignments 24 with the organization 28. FIG. 2 depicts an exemplary embodiment of the person 20 having the plurality of concurrent personnel assignments 24 with the organization 28. In the exemplary embodiment, the person 20 is Alexandra, who works for the organization 28, which comprises a hospital. Alexandra has a plurality of personnel assignments 24 with the hospital, including a first personnel assignment 24a, a second personnel assignment 24b, and a third personnel assignment 24c. In the first personnel assignment 24a, Alexandra works Mondays and Fridays from 9 a.m. to 3 p.m. as an operating-room nurse in a surgical department of an orthopedic clinic at the hospital. In the second personnel assignment 24b, Alexandra works Tuesdays and Wednesdays from 9 a.m. to 3 p.m. as a pediatric nurse in a children's clinic at the hospital. In the third personnel assignment 24c, Alexandra works Thursdays from 9 a.m. to 3 p.m. as a lab assistant in the radiology department of the orthopedic clinic. In the exemplary embodiment, Alexandra works 40% of her overall work time in the first personnel assignment 24a, 40% of her overall work time in the second personnel assignment 24b, and 20% of her overall work time in the third personnel assignment 24c.

[0015] It is typically useful for the organization 28 to conduct the business process related to the associated person 20. The business process comprises any activity that the organization 28 may wish to undertake related to the associated person 20. For example, in one embodiment, the business process comprises at least one of: providing a payment related to the person 20, taxing the payment related to the person 20, processing a termination request related to the person 20, providing a benefit related to the person 20, or processing a payroll for the person 20. The business process optionally comprises other activities typically undertaken by the organization 28.

[0016] In one embodiment, the organization 28 conducts the business process without regard to differentiating the business process according to each of the plurality of personnel assignments 24 of the person 20.

[0017] However, in one embodiment, it is useful for the organization 28 to conduct the business process in a manner which differentiates the business process according to the plurality of personnel assignments 24 of the person 20. In one embodiment, the organization 28 conducts the business process in a manner which involves only a selective subset of the plurality of concurrent personnel assignments 24 of the person 20. For example, in one embodiment, the organization 28

conducts the business process which involves at least one of: a selected single personnel assignment 24, or a selected portion of the plurality of personnel assignments 24. For example, the organization 28 may wish to raise the pay rate associated with a specific personnel assignment 24 of the plurality of personnel assignments 24, or the organization 28 may wish to terminate the specific personnel assignment 24, while not changing the pay rate of the other personnel assignments 24 or terminating the other personnel assignments 24.

[0018] The business process conducted by the organization 28 is at least partially related to software running in a computing environment. FIG. 3 depicts an exemplary embodiment of the computing environment 32. In the embodiment depicted in FIG. 3, the computing environment 32 comprises a memory 36, a processor 40 and an input device 44. The memory 36 further comprises the software 52 and data 54, which are stored in the memory 36 at least at some moment in time. The software 52 typically comprises computer program instructions which may be accessed and executed by the processor 40. The memory 36 is optionally distributed across different locations. The memory 36, processor 40 and input device 44 are connected together, and communicate with each other, by means of a communication line 48. In one embodiment, the communication 48 line comprises a system bus, and the computing environment 32 comprises a single computer. In one embodiment, the communication line 48 comprises a network element, and the computing environment 32 comprises a distributed computing system. The input device 44 optionally comprises at least one of: a keyboard, a mouse, a voice activated controller, an optical controller, or an infrared controller. Other configurations of the computing environment 32 are possible.

[0019] FIG. 4 depicts one embodiment of the software 52 in which the software 52 comprises a first set of computer program instructions 56 and a second set of computer program instructions 60. In one embodiment, the first and second sets of computer program instructions 56, 60 are capable of being accessed and executed by the processor 40 independently of each other. In one embodiment, the first set of computer program instructions 56 is capable of instructing the processor 40 to invoke the second set of computer program instructions 56 is capable of instructing the process and execute the second set of computer program instructions 60. In one embodiment, the first set of computer program instructions 56 is capable of providing the second set of computer program instructions 56 is capable of providing the second set of computer program instructions 50 with data.

[0020] In one embodiment, the first set of computer program instructions 56 comprises a Process Workbench Engine (PWE) (not shown), and the second set of computer program instructions 60 comprises a localization package (not shown), as described in "Process Workbench Engine PWE", Ruicheng Li et al., Journal of the Society of Chinese Physicists in Germany, Volume 7, Number 1, October 2003, which is hereby incorporated by reference in its entirety. In one embodiment, the first set of computer program instructions 56 comprises a generic workbench component (not shown), and the second set of computer program instructions 60 comprises a localization component (not shown), as described in U.S. patent application Ser. No. 10/400,459, to Ruicheng Li et al., entitled "System and Method for Generic Business Scenario Management," filed Mar. 28, 2003, which is hereby incorporated by reference in its entirety. The first set of computer program instructions 56, for example the PWE, and the second set of computer program instructions **60**, for example the localization package, are suitable for use by, for example, a human resources department at the organization **28**.

[0021] In one embodiment, the software 52 comprises a plurality of the second sets of computer program instructions 60, each of which may contain different computer program instructions. For example, in one embodiment, the first set of computer program instructions 56 acts to provide overall control of a plurality of tasks, each performed by at least one of the plurality of second sets of computer program instructions 60. The plurality of tasks may be tasks that are desirable or required to accomplish within the context of conducting the business process. For example, in one embodiment, the first set of computer program instructions 56 provides a control panel suitable for use by an operator in the human resources department of the organization 28. From the control panel provided by the first set of computer program instructions 56, the human resources operator can perform the plurality of tasks associated with the business process using the plurality of second sets of computer program instructions 60. Optionally, the plurality of second sets of computer program instructions 60 can be customized depending upon the particular business process with which they are being used. For example, a particular second set of computer program instructions 60 may be appropriate for a task such as processing payroll data. Another second set of computer program instructions 60 may be appropriate for a task such as terminating an employee. Another second set of computer program instructions 60 may be appropriate to any one of a plurality of other common business process tasks. Furthermore, a particular second set of computer program instructions 60 can be customized according to the location of the organization 28. For example, in one embodiment a first version of a particular second set of computer program instructions 60 is customized for a first location, and a second version of the particular second set of computer program instructions 60 is customized for a second location, the customization enabling, for example, the business process to accommodate different taxation regulations in the different locations. Optionally, the individual second sets of computer program instructions 60 communicate with each other and provide data to each other. [0022] The data 54 stored in the memory 36 comprises information related to at least one of: the organization 28, the person 20, or the business process. Optionally, the data 54 is at least partially stored in a database, and the software 52 comprises computer program instructions to access the data 54 in the database. In one embodiment, the data 54 comprises at least one of: numerical data, textual data, audio data, video data, or meta data. Both the first set of computer program instructions 56 and the second set of computer program instructions 60 are capable of accessing, modifying or creating the data 54.

[0023] FIG. 5 is a flow chart having a schematic representation of one embodiment of a method 100. The schematic nature of FIG. 5 is not intended to provide exhaustive detail concerning of the method 100, however, and instead the specific steps of the method 100 are described in greater detail in the Specification and Claims of the present Application. Furthermore, additions to, and variations of, the method 100 depicted in FIG. 5 are possible as described in the Specification and Claims of the present Application.

[0024] FIG. 6 depicts a schematic representation of a data structure 64 which in one embodiment is associated with the method 100 depicted in FIG. 5. One embodiment of the data

structure **64** comprises a person identifier **68** and at least one personnel assignment identifier **72** associated with the person identifier **68**. In one embodiment, the at least one personnel assignment identifier **72** comprises a plurality of personnel assignment identifiers **72** associated with the person identifier **68**. Each combination of person identifier **68** and associated personnel assignment identifier **72** is optionally related to at least one other data element **76**. In one embodiment, the related at least one other data element **76** comprises a plurality of related other data elements **76**. In one embodiment, the data structure **64** comprises a switch **80** associated with the person identifier **68**, the switch **80** having a state **84**. In one embodiment, the data structure **64** comprises a plurality of the person identifiers **68** and elements optionally associated with the person identifiers **68** and elements optionally associated with the person identifiers **68**.

[0025] The method 100 depicted in FIG. 5 is related to performing the business process involving the organization 28 and the associated person 20 having the plurality of concurrent personnel assignments 24. At step 102, a value of the person identifier 68 is received. The person identifier 68 identifies the person 20 associated with the organization 28 whom it is desirable to conduct the business process involving. In one embodiment, the person identifier 68 comprises at least one of: a numerical identifier, a textual identifier, or a combined numerical and textual identifier. In one embodiment, the person identifier 68 is received by the first set of computer program instructions 56, and the received person identifier 68 identifies the person 20 to the first set of computer program instructions 56. For example, the person identifier 68 may be manually entered by a human resources operator using the PWF

[0026] One embodiment of the method 100 proceeds to step 104 after step 102. At step 104, it is determined if there are a plurality of personnel assignments 24 associated with the person 20 identified by the personal identifier 68, or not more than one personnel assignment 24 associated with the identified person 20. In one embodiment, the determining of step 104 comprises searching the data 54, including at least one of: searching the data 54 for person identifiers 68 that match the received value of the person identifier 68, or searching the data 54 for personnel assignment identifiers 72 that are associated with the received person identifier 68. The personnel assignment identifiers 72 identify particular personnel assignments 24 associated with the person 20. In one embodiment, the determining of step 104 is performed at least partially by the first set of computer program instructions 56. For example, after the PWE has received the person identifier 68, it may search the data 54 for personnel assignments 24 associated with the person 20.

[0027] If, at step 104, it is determined that there are a plurality of personnel assignments 24 associated with the person 20, one embodiment of the method 100 proceeds to step 106. At step 106, a specific personnel assignment 24 is selected from among the determined plurality of personnel assignments 24. The selecting of the specific personnel assignment 24 is optionally conducted according to certain criteria. For example, in one embodiment the selecting of the specific personnel assignment 24 is performed according to the type of business process it is desired to conduct. In one embodiment, the selecting of the specific personnel assignment 24 may be performed according to received input. In one embodiment, the selecting of step 106 selects at least one of: a single personnel assignment 24 of the determined plurality

of personnel assignments 24, or a subset of the determined plurality of personnel assignments 24.

[0028] In one embodiment, the selecting of step 106 is performed at least partially using the first set of computer program instructions 56. For example, in one embodiment, the first set of computer program instructions 56 performs the selecting according to the criteria, which are optionally contained within the first set of computer program instructions 56. In one embodiment, the first set of computer program instructions 56 provides an indication of each of the plurality of personnel assignments 24, e.g., the personnel assignment identifiers 72, and enables selection of one of the plurality of personnel assignments 24 by receiving the additional input, which is optionally related to the provided indication. For example, in one embodiment, the PWE provides each of the determined plurality of personnel assignment identifiers 72 to the human resources operator, and the operator chooses one of the identifiers 72.

[0029] After step 106, one embodiment of the method 100 proceeds to step 108. At step 108, data comprising information which is related at least to both the person 20 and the selected personnel assignment 24 is processed. The processing of step 108 typically implements at least part of the business process as it relates to the selected personnel assignment 24. The method 100 is thus able to conduct the business process involving only the selected personnel assignment 24 or selected subset of the plurality of personnel assignments 24, and therefore selectively exclude certain of the plurality of personnel assignments 24 from the business process. The data processed at step 108 comprises information in the stored data 54 which is associated not only with the person identifier 68 but also with the selected personnel assignment 24. Thus, there may be additional information in the stored data 54 which is also associated with the person identifier 68 but not with the selected personnel assignment 24, and this data would not be processed at step 106. Thus, the method is useful for processing a selected subset of the stored data 54 associated with the person 20. In one embodiment, the processed data comprises the other data elements 76 associated with the person identifier 68 and selected personnel assignment identifier 72 in the data structure 64. In one embodiment, the other data elements 76 comprises at least one of: a pay rate, a taxation rate, a start date, or an end date.

[0030] If, at step 104, it is determined that there is not more than one personnel assignment 24 associated with the person 20 identified by received value of the person identifier 68, one embodiment of the method 100 proceeds to step 110. At step 110, data comprising information which is related to at least the person identifier 68 is processed. The processing of step 110 is thus capable of implementing at least part of the business process as it relates to the person identifier 68. The data processed at step 110 optionally comprises any information in the stored data 54 which is associated with the person identifier 68. Thus, the method 100 is also useful for conducting the business process in which there is only a single personnel assignment 24 which defines the relationship between the organization 28 and the person 20.

[0031] In one embodiment, the data processing of steps 108 and 110 is performed at least partially by the second set of computer program instructions 60. In one embodiment, the data processing of steps 108 and 110 is not performed by the first set of computer program instructions 56. In one embodiment, the first set of computer program instructions 56 invokes the second set of computer program instructions 60 to

perform the data processing of steps 108 and 110. The first set of computer program instructions 56 can optionally provide to the second set of computer program instructions 60 at least one of: the person identifier 68 or the selected personnel assignment identifier 72.

[0032] In one embodiment, the data processing of steps 108 and 110 implements at least part of a business process, wherein the business process comprises at least one of: providing a payment related to the person 20, providing a payment related to the selected personnel assignment 24, taxing the payment related to the person 20, taxing the payment related to the person 20, taxing the payment related to the selected personnel assignment 24, processing a termination request related to the person 20, processing a termination request related to the specific personnel assignment 24, providing a benefit related to the person 20, providing a benefit related to the selected personnel assignment 24, processing a payroll for the person 20, or processing the payroll for the personnel assignment 24. In one embodiment, the business process is performed by the human resources department of the organization 28.

[0033] In one embodiment, the first set of computer program instructions 56 is executed by the processor 40 separately from the second set of computer program instructions 60. For example, the first set of computer program instructions 56 optionally comprises a first executable file, and the second set of computer program instructions 60 optionally comprises a second executable file, wherein the first and second executable files are separate files. One potential advantage of the embodiment in which the first and second set of computer program instructions 56, 60 are separately executable by the processor 40 is that such an embodiment at least partially increases the ease with which the method 100 may be applied to different or updated business processes. For example, the organization 28 may update or change the second set of computer programming instructions 60 to update or change an aspect of the business process implemented by the data processing of steps 108 and 110 without impacting the remaining portion of the method 100, for example, in one embodiment, the portion of the method 100 implemented by steps 102, 104 and 106.

[0034] Other distributions of the method steps between the first and second set of computer program instructions 56, 60 are also possible. For example, in one embodiment, the method 100 comprises the use of only the first set of computer program instructions 56, and not the second set of computer program instructions 60. In one embodiment, a portion of the data processing of at least one of steps 108 or 110 is performed at least partially by both the first and second sets of computer program instructions 56, 60.

[0035] In one embodiment, the method 100 comprises associating the switch 80 with the person identifier 68. The state 84 of the switch 80, any given time, comprises one of a plurality of possible states 84, including a first state which indicates there is the not more than one personnel assignment 24 associated with the person 20 identified by the person identifier 68, and a second state which indicates there are the plurality of personnel assignments 24 associated with the person 20 identified by the person identifier 68. The switch 80 is useful for determining if there is the plurality of personnel assignments 24 associated with the person identifier 68 or if there is the not more than one personnel assignment 24 associated with the person identifier 68. In one embodiment, the determining of step 104 comprises determining the state 84 of the switch 80.

[0036] In one embodiment, the method 100 comprises setting the state 84 of the switch 80. For example, in one embodiment, the state 84 of the switch 80 may be set by the human resources operator using the PWE. In another embodiment, the state 84 of the switch 80 is set automatically by at least one of the first or second sets of computer program instructions 56, 60. For example, in one embodiment, the state 84 of the switch 80 is set automatically by at least one of the first or second sets of computer program instructions 56, 60 upon detecting the plurality of personnel assignment identifiers 72 associated with the person identifier 68.

[0037] In one embodiment, the method 100 comprises displaying information related to the person 20 at the same time as displaying information related to at least one of the plurality of personnel assignments 24. For example, in one embodiment, the method 100 comprises displaying the person identifier 68 at the same time as displaying the selected personnel assignment identifier 72. In one embodiment, the method 100 comprises displaying the person identifier 68 at the same time as displaying at least one of: at least one of the plurality of personnel assignment identifier 72, the plurality of personnel assignment identifiers 72, the selected personnel assignment identifiers 72, the switch 80, or at least one state 84 of the switch 80.

[0038] In one embodiment, the displaying uses an at least partially electronic apparatus such as, for example, a computer monitor, a television, or a video projector. FIG. 7 depicts a representation of one embodiment of a first display 120 having the concurrently displayed information related to the person 20 and information related to the at least one of the plurality of personnel assignments 24. The embodiment of the first display 120 depicted in FIG. 7 has a first region 124 comprising elements generated by the first set of computer program instructions 56, and a second region 128 comprising elements generated by the second set of computer program instructions 60. In the depicted embodiment, the first region 124 comprises the person identifier 68 and the selected personnel assignment identifier 72. In the depicted embodiment, the first region 124 also comprises a selection element 130 to enable the selecting of the specific personnel assignment 24 of step 106.

[0039] In one embodiment, the method 100 comprises displaying a first search field 136 related to the person identifier 68 at the same time as displaying a second search field 140 related to the personnel assignment identifier 24. FIG. 8 depicts a representation of one embodiment of a second display 132 having the concurrently displayed first search field 136 and second search field 140. The embodiment depicted in FIG. 8 also has the first region 124 comprising elements generated by the first set of computer program instructions 56, and the second region 128 comprising elements generated by the second set of computer program instructions 60. In the depicted embodiment, the first region 124 comprises the first and second search fields 136, 140.

[0040] In one embodiment, a computer-readable medium comprises computer program instructions that perform the method 100. In one embodiment, the computer program instructions of the computer-readable medium comprise the first set of computer program instructions 56 and the second set of computer program instructions 60. In one embodiment, the computer-readable medium is a distributed computer readable medium.

[0041] In one embodiment, the data structure 64 is operable to enable the performance of at least a portion of the business

process. In one embodiment, the data structure 64 is operable to enable the performance of the method 100. In one embodiment, the data structure 64 is operable to enable the performance of aspects of the business process including tangible actions such as, for example, actions comprising at least one of: providing the payment related to the person 20, providing the payment related to the selected personnel assignment 24, taxing the payment related to the person 20, taxing the payment related to the selected personnel assignment 24, processing the termination request related to the person 20, processing the termination request related to the specific personnel assignment 24, providing the benefit related to the person 20, providing the benefit related to the selected personnel assignment 24, processing the payroll for the person 20, or processing the payroll for the specific personnel assignment 24.

[0042] Further embodiments of the present invention are also possible, which are the result of variously combining steps, elements or embodiments described herein. For example, further embodiments of the method 100 may comprise an altered order of the steps described herein, the result of which may be an embodiment particularly suited to a specific purpose or implementation of a specific business process. In another example, an embodiment of the method 100 may include or exclude optional steps. Further embodiments of the present invention, which would be discernable based on the disclosure of the present Application, are also possible.

1-26. (canceled)

- 27. A data structure stored on a computer readable medium, the data structure comprising:
 - a person identifier associated with a person;
 - a switch associated with the person identifier, wherein the switch has a state, the state having a possible first value indicating there is not more than one personnel assignment associated with the person, and a possible second value indicating there are a plurality of personnel assignments associated with the person; and
 - if the state of the switch has the second value, a plurality of personnel assignment identifiers associated with the person identifier, each personnel assignment identifier identifying a respective personnel assignment associated with the person,
 - wherein the data structure is operable to enable the performance of a business process related to the person, an organization, and at least one of the plurality of personnel assignments.

- 28. The data structure of claim 27, wherein the data structure enables is capable of being used by a first set of computer program instructions to invoke a second set of computer program instructions to process data associated related to at least both the person identifier and a selected personnel assignment of the plurality of personnel assignments.
- 29. The data structure of claim 28, wherein the data structure is capable of being used by the first set of computer program instructions to provide the person identifier and the selected personnel assignment to the second set of computer program instructions.
- 30. The data structure of claim 27, wherein the state of the switch is capable of being selectively set to the first and second values.
- **31**. The data structure of claim **27**, wherein the business process comprises at least one of:
 - providing a payment related to the person, providing a payment related to a specific personnel assignment, taxing the payment related to the person, taxing the payment related to the specific personnel assignment, processing a termination request related to the person, processing a termination request related to the specific personnel assignment, providing a benefit related to the person, providing a benefit related to the specific personnel assignment, processing the payroll for the person, or processing the payroll for the specific personnel assignment.
- **32**. The data structure of claim **27**, wherein the business process is at least partially performed by a human resources department at the organization.
- 33. The data structure of claim 27, wherein the data structure is capable of being used to display, using an at least partially electronic apparatus, the person identifier at the same time as at least one of: a selected one of the plurality of personnel assignments, or the state of the switch.
- 34. The data structure of claim 28, wherein the data structure is capable of being used by the first set of computer program instructions to search data comprising a plurality of the person identifiers and personnel assignments, wherein search parameters comprise at least one of: a value of the person identifier, or a value of the personnel assignment identifier.

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