

4. The method of claim 1, wherein said programming RFID tags include retrieving a unique RFID tag identifier from the RFID tag using an RFID reader device; linking data associated with the utility asset to the unique RFID tag identifier; and checking out the programmed RFID tag from an RFID inventory database.

5. The method of claim 1, wherein said joint tag includes data about the specific joint of the utility asset including data about the person who performed any repair or operation on the specific joint, the date of the repair or operation and the type of the repair or operation.

6. The method of claim 1, wherein said segment tag includes one or more of the following: associated data describing the specific segment; data related to testing or validation of the specific segment; and data describing the area in which a repair of the segment was performed, according to a plurality of stored business rules.

7. The method of claim 1, wherein said segment tag further includes stored data describing a location of any crossing of other utility assets with the specific segment data including data about one or more of restricted areas, roads, and rivers.

8. The method of claim 1, further comprising programming a repair RFID tag and placing the programmed repair RFID tag on or about a repair area on the utility asset to describe and validate a repair work performed on the repair area.

9. The method of claim 1, wherein said audit program validates that all required data and all tag installation rules have been followed, according to a plurality of stored business rules.

10. The method of claim 1, further comprising pointing an RFID reader device to the utility asset including the placed RFID tags; distinguishing and identifying a particular placed RFID tag from the placed RFID tags by the reader device; and retrieving data from the identified RFID tag by the reader device.

11. The method of claim 10, further comprising generating a plurality of revised data records for the utility asset based on the retrieved data, the stored data and data from a data source, related to the utility asset; and storing the revised data records for the utility asset in the database.

12. The method of claim 1, wherein the placed RFID tags include a sensor to sense any gas molecule leaks from the utility asset.

13. The method of claim 1, wherein said utility asset is a pipeline and wherein said segment tag further includes data describing environmental conditions of a ditch where the specific segment of the pipeline was buried, and data describing a start point and a stop point of a pressure test performed on the specific segment.

14. A computer implemented method for capturing, organizing and retrieving data for utility assets using RFID tags, the method comprising:

storing data related to a plurality of utility assets in a database, wherein the stored data includes data about

type of the utility assets; repair, documentation, testing validation, and inspection of the utility assets; programming a plurality of RFID tags for placement on a utility asset, by one or more processors, wherein said programming comprises:

retrieving a unique RFID tag identifier from a programmed RFID tag using an RFID reader device, linking data associated with the utility asset to the unique RFID tag identifier, and

checking out the programmed RFID tag from an RFID inventory database by one or more processors;

placing the programmed RFID tag on the utility asset; linking stored data related to the utility asset with the programmed data for the placed RFID tag, including location data of the placed RFID tag; and

querying the placed RFID tag to retrieve data about the utility asset including data about the location of the utility asset, the type of the utility asset, repair, documentation, testing validation, and inspection of the utility asset, by one or more processors, wherein said data associated with the utility asset includes stored data describing environmental conditions including soil conditions of a location where the specific segment was installed, and data describing the environmental conditions including ambient temperature at a time when a repair was performed on the specific segment, and wherein querying one or more of the placed RFID tags to retrieve data further comprises executing an audit program to validate the data or compliance of the data to certain standards.

15. The method of claim 14, wherein at least one of the programmed RFID tags is placed on a specific segment of the utility asset as a segment tag, and at least one of the programmed RFID tags is placed near a specific joint of the utility asset as a joint tag.

16. The method of claim 14, further comprising generating a report about the utility asset, according to a plurality of stored rules.

17. The method of claim 14, wherein said stored data related to the plurality of utility assets includes one or more of data collection dates and methods, photographs, voice, videos, and location points, related to the utility asset.

18. The method of claim 14, further comprising programming a repair RFID tag and placing the programmed repair RFID tag on or about a repair area on the utility asset to describe and validate a repair work performed on the repair area.

19. The method of claim 14, wherein said audit program validates that all required data and all tag installation rules have been followed, according to a plurality of stored business rules.

20. The method of claim 14, further comprising generating a plurality of revised data records for the utility asset based on the stored data and data from a data source, related to the utility asset; and storing the revised data records for the utility asset in the database.

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