

Similarly, in the event the item contains multiple components, each of which individually contained a microchip, the label may provide a validation of each of the components' manufacture and/or a link to information about each of the individual components of the item.

[24] In the example shown in Fig. 4, a first 410, second 420, and third 430 raw material is provided to a manufacturing building or factory 445. The raw materials may themselves contain a microchip and/or label. For example, in a smartphone assembly plant, the raw materials may represent a processor and motherboard, a cellular antenna, and a display. Each of these components may have been separately manufactured.

[25] The factory 445 may contain one or more buildings and may be associated with a geofence or other boundary 440 that demarcates a first building 451 and a second building 452 as belonging to the single manufacturer 445. As stated above, the factory may have more than one location associated with it. In some instances, the proximity of the building may be in close proximity to one another. But in some instances the buildings belonging to the factory may be physically separated and intervening structures (e.g., environment, other industrial, commercial, or residential buildings, etc.) may exist between the separate buildings. Nonetheless, the buildings may be associated with the same factory. A microchip may be associated with the item at the location of the factory 470 during at an early or initial phase of manufacture or assembly of the item. The microchip may be activated upon association with the item. Activation of the microchip may be performed by an electronic signal that is received by the microchip. In some instances, the microchip may require a battery to be inserted into it to provide power for the GPS sensor that it contains. Moreover, the microchip may contain other hardware and circuitry suitable for it to be able to communicate data (e.g., GPS and time data) 477 to a database 472. The microchip, for example, may report data as shown below in Table 1:

<u>Time</u>	<u>GPS Coordinates</u>	<u>Entity</u>	<u>Building</u>
07-04-2014-5:00 AM GMT	38.894967, -77.034917	ABC	First building
07-04-2014-5:00 AM GMT	38.894967, -77.034917	ABC	First building
07-04-2014-5:00 AM GMT	38.894967, -77.034917	ABC	First building

07-04-2014-5:00 AM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-5:00 AM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-5:00 AM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-5:00 AM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-5:00 AM GMT	37.795050, -122.402729	XYZ	First building

Table 1: Example data that may be sent/stored by the microchip and/or derived therefrom.

[26] The data provided by the microchip may be stored to computer readable memory such as FLASH or NAND rom that is part of the microchip. The stored data may be later retrieved at the end of the manufacturing process and uploaded to a database 472 at that time. In some configurations, the microchip may transmit the data to a database 472 directly or indirectly. The data transmitted by the microchip may be sent in a more compact form. For example, the data sent by the microchip for the first building may be: 07-04-2014-5:00AMGMT*38.894967*-77.034917 where each asterisk separates values. The database 472 may associate the entity and building that corresponds to the GPS data provided by the microchip. In the example shown in Fig. 4 and the example data provided in Table 1, the locations of the first building 451 and the second building 452 are distinct, but substantially similar. Thus, both the first building 451 and the second building 452 are identified as belonging to the entity of the manufacturing company, ABC.

[27] Subsequent to the manufacture of the item, a label may be affixed or associated with the item 475 by the manufacturer 445 or the retailer 460. The label may be placed on the item or packaging of the item. It may be exposed to the outside environment so that a consumer may easily scan the label to obtain the desired manufacturing information. As described above, scanning the label, for example with a smartphone, may access a database 472 to which the microchip data are stored 479. Various implementations may store the microchip data on a first database and store the same or modified version thereof on a second database that is distinct from the first database. A user who scans the label may be presented with the data shown in Table 1 as well as additional information about the manufacturer 445 and retailer 460 as described earlier.

CLAIMS

1. A computer-implemented method, comprising:
 - receiving, from a microchip associated with an item, at least one indication of geolocation, wherein each indication of the at least one indication corresponds to a location;
 - obtaining a second geolocation from a label wherein the second geolocation corresponds to a second location;
 - receiving a request based on a scan of the label by a consumer, wherein the request is for geolocation data associated with the item, wherein the geolocation data comprises the at least one indication of geolocation and the second geolocation from the label;
 - generating a response to the request, wherein the response comprises a representation that the at least one indication of geolocation and the second geolocation are substantially similar;
 - and
 - providing the response to an electronic device of the consumer.
2. The method of claim 1, further comprising inserting, into the item, the microchip that communicates the at least one indication of geolocation.
3. The method of claim 2, wherein the step of inserting the microchip is performed by a scanner or a printer.
4. The method of claim 3, wherein at least one of the at least one indication of geolocation comprises a geolocation of the scanner at the location.
5. The method of claim 1, wherein the at least one indication of geolocation comprises a set of coordinates indicating a boundary region of the location.

6. The method of claim 1, further comprising associating the microchip with the item.
7. The method of claim 1, further comprising receiving a time reference contemporaneously with each of the at least one indication of geolocation.
8. The method of claim 7, further comprising receiving a second time reference contemporaneously with the second geolocation.
9. The method of claim 1, further comprising programming the microchip with the at least one indication of geolocation.
10. The method of claim 1, further comprising, obtaining a microchip programmed with the at least one indication of geolocation.
11. The method of claim 1, wherein the item comprises one or more components.
12. The method of claim 11, wherein each of the one or more components is associated with a unique microchip.
13. The method of claim 1, wherein a manufacture of the item comprises one or more steps.
14. The method of claim 13, further comprising obtaining at least one of a third geolocation and a third time reference from the microchip at each of the one or more steps.
15. The method of claim 14, further comprising:
comparing the third geolocation to the second geolocation; and

determining that the third geolocation and the second geolocation are substantially similar.

16. The method of claim 1, further comprising storing at least one of the at least one indication of geolocation, the second geolocation, and the response to a computer readable medium.

17. The method of claim 1, further comprising receiving one or more image captures from a camera associated with the microchip.

18. The method of claim 1, wherein the response further comprises data specific to a manufacturer of the item and wherein the data is selected from the group consisting of: audio data, image data, video data, employment data, and social compliance data.

19. The method of claim 18, further comprising receiving approval from a retailer to make the data accessible by a consumer.

20. The method of claim 19, further comprising determining that the consumer has authority to access the data.

21. The method of claim 1, further comprising:
generating the label; and
associating the label with the item subsequent to production of the item.

22. A system, comprising:

a database for storing geolocation data for at least one manufacturer of an item;

a processor connected to the database, configured to:

receive, from a microchip associated with the item, at least one indication of geolocation, wherein each indication of the at least one indication corresponds to a location;

obtain a second geolocation from a label wherein the second geolocation corresponds to a second location;

receive a request based on a scan of the label by a consumer, wherein the request is for geolocation data associated with the item, wherein the geolocation data comprises the at least one indication of geolocation and the second geolocation from the label;

generate a response to the request, wherein the response comprises a representation that the at least one indication of geolocation and the second geolocation are substantially similar; and

provide the response to an electronic device of the consumer.

Similarly, in the event the item contains multiple components, each of which individually contained a microchip, the label may provide a validation of each of the components' manufacture and/or a link to information about each of the individual components of the item.

[24] In the example shown in Fig. 4, a first 410, second 420, and third 430 raw material is provided to a manufacturing building or factory 445. The raw materials may themselves contain a microchip and/or label. For example, in a smartphone assembly plant, the raw materials may represent a processor and motherboard, a cellular antenna, and a display. Each of these components may have been separately manufactured.

[25] The factory 445 may contain one or more buildings and may be associated with a geofence or other boundary 440 that demarcates a first building 451 and a second building 452 as belonging to the single manufacturer 445. As stated above, the factory may have more than one location associated with it. In some instances, the proximity of the building may be in close proximity to one another. But in some instances the buildings belonging to the factory may be physically separated and intervening structures (e.g., environment, other industrial, commercial, or residential buildings, etc.) may exist between the separate buildings. Nonetheless, the buildings may be associated with the same factory. A microchip may be associated with the item at the location of the factory 470 during at an early or initial phase of manufacture or assembly of the item. The microchip may be activated upon association with the item. Activation of the microchip may be performed by an electronic signal that is received by the microchip. In some instances, the microchip may require a battery to be inserted into it to provide power for the GPS sensor that it contains. Moreover, the microchip may contain other hardware and circuitry suitable for it to be able to communicate data (e.g., GPS and time data) 477 to a database 472. The microchip, for example, may report data as shown below in Table 1:

<u>Time</u>	<u>GPS Coordinates</u>	<u>Entity</u>	<u>Building</u>
07-04-2014-5:00 AM GMT	38.894967, -77.034917	ABC	First building
07-04-2014-5:30 AM GMT	38.894967, -77.034917	ABC	First building
07-04-2014-8:00 AM GMT	38.894967, -77.034917	ABC	First building

07-04-2014-8:10 AM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-6:00 PM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-6:03 PM GMT	38.898000, -77.036517	ABC	Second building
07-04-2014-9:00 PM GMT	38.898000, -77.036517	ABC	Second building
07-11-2014-1:46 PM GMT	37.795050, -122.402729	XYZ	Retailer

Table 1: Example data that may be sent/stored by the microchip and/or derived therefrom.

[26] The data provided by the microchip may be stored to computer readable memory such as FLASH or NAND rom that is part of the microchip. The stored data may be later retrieved at the end of the manufacturing process and uploaded to a database 472 at that time. In some configurations, the microchip may transmit the data to a database 472 directly or indirectly. The data transmitted by the microchip may be sent in a more compact form. For example, the data sent by the microchip for the first building may be: 07-04-2014-5:00AMGMT*38.894967*-77.034917 where each asterisk separates values. The database 472 may associate the entity and building that corresponds to the GPS data provided by the microchip. In the example shown in Fig. 4 and the example data provided in Table 1, the locations of the first building 451 and the second building 452 are distinct, but substantially similar. Thus, both the first building 451 and the second building 452 are identified as belonging to the entity of the manufacturing company, ABC.

[27] Subsequent to the manufacture of the item, a label may be affixed or associated with the item 475 by the manufacturer 445 or the retailer 460. The label may be placed on the item or packaging of the item. It may be exposed to the outside environment so that a consumer may easily scan the label to obtain the desired manufacturing information. As described above, scanning the label, for example with a smartphone, may access a database 472 to which the microchip data are stored 479. Various implementations may store the microchip data on a first database and store the same or modified version thereof on a second database that is distinct from the first database. A user who scans the label may be presented with the data shown in Table 1 as well as additional information about the manufacturer 445 and retailer 460 as described earlier.

CLAIMS

1. A computer-implemented method, comprising:
 - receiving, from a microchip affixed to an item, at least one indication of geolocation, wherein each indication of the at least one indication of geolocation corresponds to a first location, wherein the microchip is configured to record location data at a predetermined interval;
 - obtaining a second geolocation from a label, wherein the second geolocation corresponds to a second location;
 - receiving a request based on a scan of the label by a consumer, wherein the request is for geolocation data associated with the item, wherein the geolocation data comprises the at least one indication of geolocation and the second geolocation from the label;
 - generating a response to the request, wherein the response comprises a representation that the at least one indication of geolocation and the second geolocation are substantially similar; and
 - providing the response to an electronic device of the consumer.
2. The method of claim 1, further comprising inserting, into the item, the microchip that communicates the at least one indication of geolocation.
3. The method of claim 2, wherein the step of inserting the microchip is performed by a scanner or a printer.
4. The method of claim 3, wherein at least one of the at least one indication of geolocation comprises a geolocation of the scanner at the location.
5. The method of claim 1, wherein the at least one indication of geolocation comprises a set of coordinates indicating a boundary region of the location.
6. The method of claim 1, further comprising associating the microchip with the item.
7. The method of claim 1, further comprising receiving a time reference contemporaneously

with each of the at least one indication of geolocation.

8. The method of claim 7, further comprising receiving a second time reference contemporaneously with the second geolocation.

9. The method of claim 1, further comprising programming the microchip with the at least one indication of geolocation.

10. The method of claim 1, further comprising obtaining the microchip programmed with the at least one indication of geolocation.

11. The method of claim 1, wherein the item comprises one or more components.

12. The method of claim 11, wherein each of the one or more components is associated with a unique microchip.

13. The method of claim 1, wherein a manufacture of the item comprises one or more steps.

14. The method of claim 13, further comprising obtaining at least one of a third geolocation and a time reference from the microchip at each of the one or more steps.

15. The method of claim 14, further comprising:
comparing the third geolocation to the second geolocation; and
determining that the third geolocation and the second geolocation are substantially similar.

16. The method of claim 1, further comprising storing, to a computer readable medium, at least one of the at least one indication of geolocation, the second geolocation, and the response.

17. The method of claim 1, further comprising receiving one or more image captures from a camera associated with the microchip.

18. The method of claim 1, wherein the response further comprises data specific to a manufacturer of the item and wherein the data is selected from the group consisting of: audio data, image data, video data, employment data, and social compliance data.
19. The method of claim 18, further comprising receiving approval from a retailer to make the data accessible by a consumer.
20. The method of claim 19, further comprising determining that the consumer has authority to access the data.
21. The method of claim 1, further comprising:
generating the label; and
associating the label with the item subsequent to production of the item.
22. A system, comprising:
a database for storing geolocation data for at least one manufacturer of an item;
a processor connected to the database, configured to:
receive, from a microchip affixed to an item, at least one indication of geolocation, wherein each indication of the at least one indication of geolocation corresponds to a first location, wherein the microchip is configured to record location data at a predetermined interval;
obtain a second geolocation from a label, wherein the second geolocation corresponds to a second location;
receive a request based on a scan of the label by a consumer, wherein the request is for geolocation data associated with the item, wherein the geolocation data comprises the at least one indication of geolocation and the second geolocation from the label;
generate a response to the request, wherein the response comprises a representation that the at least one indication of geolocation and the second geolocation are substantially similar; and
provide the response to an electronic device of the consumer.