

CLAIMS

1. An apparatus comprising a main receptacle, an RFID first detector, an RFID second detector and a processor; wherein said main receptacle is to hold articles for customer selection, said first RFID detector comprises a first antenna or a first wireless sensor which is to detect radio frequency signals coming in from RFID tags on the main receptacle and which is to detect presence of an RFID-tagged article on said main receptacle, and said second detector comprises a second antenna or a second wireless sensor which is to detect radio frequency signals coming from outside of the apparatus and not from RFID tags attached to articles on the main receptacle and to check out or deregister an article after said article has been removed from said main receptacle; wherein the processor is to collect identification information of an article upon introduction of said article into the main receptacle during a serving session and to register introduction of said article, and wherein the processor is to check out or de-register said article from said serving session upon detection of presence of said article at said second detector.
2. An apparatus according to Claim 1, wherein the processor is to continuously track presence and absence of an article from said main receptacle through said first detector after said article has been checked in or registered until said article is checked out or de-registered through said second detector.
3. An apparatus according to Claims 1 or 2, wherein said first wireless sensor is arranged to detect RFID (radio frequency identification) signals.
4. An apparatus according to any of the preceding Claims, wherein said second wireless sensor is arranged to detect RFID (radio frequency identification) signals.
5. An apparatus according to Claim 4, wherein said first wireless sensor comprises a first antenna which is distributed underneath the main receptacle and the second wireless sensor comprises a second antenna which is disposed on a side of a rigid housing which defines said main receptacle, and the side of said rigid housing on which said second antenna is mounted is distal from said main receptacle.
6. An apparatus according to Claim 5, wherein said first antenna and said second antenna are arranged to detect NFC (near field communication) RFID signals.
7. An apparatus according to Claim 5, wherein separation between said first antenna and said second antenna exceeds a predetermined detection range of said second antenna.

8. An apparatus according to any of Claims 5 to 7, wherein detection range of said first antenna is set to cover the entire main receptacle and the detection range of the second antenna is set to be in a direction away from said main receptacle.
9. An apparatus according to any of Claims 5 to 8, wherein the main beam or main detection directions of said first antenna and said second antenna are at least at 45° apart.
10. An apparatus according to any of Claims 5 to 9, wherein the main beam or main detection direction of said second antenna is parallel or substantial parallel to an article holding surface of said main receptacle.
11. An apparatus according to any of Claims 5 to 10, wherein the main beam width of said first antenna is substantially wider than that of said second antenna.
12. An apparatus according to any preceding Claims, wherein both said first and said second detectors are to detect RFID signals emitted from an RFID tag associated with an article.
13. An apparatus according to any of the preceding Claims, wherein the processor is to register an article as a checked-in item upon introduction of the article into the main receptacle during a serving session and to continuously track presence and absence of said article from said main receptacle until said article is de-registered or checked out.
14. An apparatus according to Claim 13, wherein the processor is to update an article as being checked out of the serving apparatus when the article is placed proximally against said second antenna.
15. An apparatus according to any of the preceding Claims, wherein the apparatus comprises a display device, and the display device is connected to the processor for displaying information processed by the processor in relation to articles introduced onto said main receptacle and to movement of articles during a serving session, and wherein the display device is disposed between said first and said second antennae.
16. An apparatus according to any of the preceding Claims, wherein the apparatus comprises a first display portion and the processor is to cause display of product information relating to an article on said main receptacle on said first display portion, said product information comprising one or more of the following: product identification, product appearance, weight, unit price, available discount.

17. An apparatus according to Claim 16, wherein the apparatus comprises a second display portion to display number of articles on said main receptacle.
18. An apparatus according to Claim 17, wherein the apparatus comprises a third display portion to display number of articles removed from said main receptacle and not checked-out.
19. An apparatus according to any of the preceding Claims, wherein the processor is to repeatedly scan the main receptacle to determine identification of articles on the main receptacle and articles removed from the main receptacle and to display information on the number of articles removed from the main receptacle until an article is checked out.
20. An apparatus according to any of the preceding Claims, wherein a removable tray is placed on top of said receptacle, and the tray is for carrying jewelry or ornamental articles for displaying to customers for selection.
21. An apparatus according to any of the preceding Claims, wherein the apparatus is of desktop type or portable type.