CLAIMS

1. A processing station for registering a passenger's luggage for a trip, wherein the processing station comprises:

   a luggage transportation tub having a first shape, the tub being adapted to receive the luggage associated with the passenger;

   an injector for receiving the tub with the luggage therein;

   a group of sensors comprising at least one sensor, the group of sensors associated with the injector, wherein the group of sensors positioned so as to allow an image of the tub with the luggage to be taken; and

   a controller associated with the group of sensors, the controller being adapted to control the operation of the group of sensors and wherein the controller compares an image taken to a database of predefined tub shapes.

2. The luggage processing station of claim 1, wherein the controller includes pattern recognition software for comparing the image taken to the database of predefined tub shapes.

3. The luggage processing station of claim 2, wherein the pattern recognition software recognises three-dimensional tub shapes.

4. The luggage processing station of claim 1, wherein the group of sensors comprises at least one three-dimensional imaging camera.

5. The luggage processing station of claim 1, wherein the controller confirms with the passenger the use of the tub.

6. The luggage processing station of claim 1, wherein the injector includes a weighing sensor electrically connected to the controller.

7. The luggage processing station of claim 6, wherein the controller using the weighing sensor measures the combined weight of the luggage and tub, and

then subtracts the weight of the tub from combined weight to determine the resulting luggage weight.

8. The luggage processing station of claim 7, wherein the controller records the resulting luggage weight with the passenger’s flight information.

9. The luggage processing station of claims 1, wherein the group of sensors has at least one sensor which is an image sensor.

10. The luggage processing station of claims 1, wherein the group of sensors associated with the injector, in combination with at least the floor of the injector, creates a zone.

11. The luggage processing station of claim 10, wherein the controller associated with the group of sensors is adapted to: monitor, via the group of sensors, intrusions through the zone.

12. The luggage processing station of claim 11, wherein the group of sensors determines one or more of whether a predetermined limit on dimensions of the luggage has been exceeded or whether a foreign object has intruded the zone.

13. The luggage processing station of claims 11, wherein the controller allows further processing of the luggage only if no intrusion of the zone is detected.

14. The luggage processing station of claim 1, wherein the volume of the zone is dynamically adjusted when luggage is positioned within the injector.

15. The luggage processing station of claim 1, the luggage processing station is adapted to store a history of luggage that has been processed.