Claims

1. Donation receiving apparatus comprising a storage area therein, a denomination discriminator interfacing the storage area, the denomination discriminator comprising at least one sensor for sensing at least one physical characteristic of currency passing therethrough, a mobile communication device interface for communication with a mobile communication device, and a device controller interfacing the mobile communication device interface and the denomination discriminator wherein, in use, the device controller is configured for establishing communication with the mobile communication device, detecting a denomination using the at least one physical characteristic and transmitting the denomination to the mobile communication device, wherein:

the denomination discriminator comprises:

an entrance slot for taking both coins and notes;

a pair of parallel rollers aligned with the slot to take both the coins and notes therebeween;

a rotation transducer operably coupled to the rollers; and

a displacement transducer operably coupled to the rollers to measure displacement therebetween;

wherein, using the same pair of rollers, the controller is configured for determining both length of the currency inserted through the slot using the rotation transducer and thickness of the currency inserted through the slot using the displacement transducer and determining the denomination according to the length and thickness; and

the apparatus is configured for verifying the denomination by image processing captured currency image data and, if the apparatus detects that the currency image data does not meet acceptable image characteristics of the denomination, the apparatus is configured for causing the device controller to reject the currency by turning the rollers.

2. The apparatus as claimed in claim 1, wherein the mobile communication device executes an application controller and wherein the application controller is configured for displaying a graphical user interface on a digital display thereof and wherein the graphical user interface is controlled by the application controller to display the denomination.

3. The apparatus as claimed in claim 1, wherein the sensors comprise interrupts sensors along the entrance slot and wherein the controller is configured for detecting the denomination according to which of the interrupt sensors are interrupted.

4. The apparatus as claimed in claim 3, wherein the interrupt sensors comprise a central interrupt sensor and lateral interrupt sensors and wherein the device controller is

configured for detecting the insertion of a coin when the central interrupt sensor is interrupted and the lateral interrupt sensors are not interrupted.

5. The apparatus as claimed in claim 4, wherein the device controller is configured for detecting the insertion of a note when the lateral interrupt sensors are interrupted.

6. The apparatus as claimed in claim 5, wherein the device controller is configured for detecting whether the lateral interrupt sensors are interrupted substantially simultaneously.

7. The apparatus as claimed in claim 1, wherein the rotation transducer comprises an optic sensor detecting markings on a rotating disc coupled to the rollers.

8. The apparatus as claimed in claim 1, wherein the apparatus comprises a fixed frame holding a first of the rollers and a displaceable frame holding a second of the rollers and wherein the displacement transducer measure displacement of the displaceable frame.

9. The apparatus as claimed in claim 8, wherein the displaceable frame comprises a moving piece interfering with an optic sensor.

10. The apparatus as claimed in claim 1, wherein the controller is configured with acceptable denomination dimension parameters and wherein the device controller is configured for detecting whether at least one of measured thickness and length of the currency meets the acceptable denomination dimension parameters.

11. The apparatus as claimed in claim 10, further comprising a drive for turning the rollers and wherein the controller is configured for turning the rollers to reject currency from the slot when detecting that the currency does not meet the acceptable nomination characteristics.

12. The apparatus as claimed in claim 1, wherein the apparatus comprises a cradle for holding the mobile communication device adjacent a viewport for capturing the currency image data using a rearward image sensor thereof.

13. The apparatus as claimed in claim 12, wherein the mobile communication device executes an application controller comprising an image processing controller which processes the currency image data.

14. The apparatus as claimed in claim 13, wherein the device controller is configured for transmitting the denomination to the mobile communication device and wherein the mobile communication device is configured for verifying the denomination using the image processing controller and, if the image processing controller detect that the currency image data does not meet acceptable image characteristics, the application controller is configured for causing the device controller to reject the currency.

15. The apparatus as claimed in claim 1, wherein the image processing is configured for detecting a shape of the denomination.

16. The apparatus as claimed in claim 1, wherein the image processing is configured for detecting a dimension of the denomination.

17. The apparatus as claimed in claim 1, wherein the image processing is configured for detecting a colour of the denomination.

18. The apparatus as claimed in claim 1, wherein the image processing controller is configured for recognising and alpha numeric value of the denomination.

19. The apparatus as claimed in claim 1, wherein the apparatus comprises a lid lockable over the denomination discriminator and wherein the controller is configured for allowing the unlocking of the lid when in communication with the mobile communication device.

20. The apparatus as claimed in claim 1, wherein the apparatus comprises a lid lockable over the denomination discriminator and wherein the lid comprises a cover supported at a distal end of a stem slidably engaged within a body of the apparatus.

21. The apparatus as claimed in claim 1, wherein the apparatus comprises a cradle comprising an upper and lower offset-adjustable brackets for retaining corresponding upper and lower edges of the mobile communication device therebetween.