CLAIMS:

1. A baggage transfer conveyer unit for use with a baggage carousel having a carousel transferring path for transferring a baggage therealong, the baggage transfer conveyor unit configured for being mounted over the baggage carousel and comprising:

- a proximal end, a distal end, an upper surface by means of which the baggage is to be transferred from said proximal end to said distal end along a conveyor unit transferring path extending between said ends;
- a baggage transferring mechanism configured for causing said upper surface to transfer the baggage along said conveyor transferring path; and
- a baggage diverting mechanism configured for causing a part of said upper surface to divert the baggage from the conveyer unit transferring path along a diverted direction different from that of said conveyor unit transferring path;

wherein the baggage transfer conveyer unit is configured to be mounted over said baggage carousel such that the conveyer transferring path is aligned with the carousel transferring path.

2. A baggage transfer conveyer unit according to Claim 1, wherein said conveyor unit transferring path is configured for forming a continuous baggage transferring path with said carousel transferring path when the conveyor unit is mounted over said carousel and when the baggage diverting mechanism is not in operation.

3. A baggage transfer conveyer unit according to Claim 1 or 2, wherein the upper surface of the conveyer unit comprises a top surface portion, a proximal surface portion extending between the proximal end of the conveyer unit and the top surface portion, and a distal surface portion extending between the top surface portion and the distal end of the conveyer unit and, optionally, wherein the upper surface has a convexly curved shape such that the proximal surface portion extends upwardly from the proximal end to the top surface portion and the distal surface portion extends downwardly from the top portion to the distal end.

4. A baggage transfer conveyer unit according to any one of the preceding claims, further comprising:

- a lower surface extending between the proximal and distal ends of the conveyer unit so as to face the baggage carousel when the baggage transfer conveyer unit is mounted over the baggage carousel,
- two sides extending between the upper and lower surfaces and defining therewithin a body of the conveyer unit.

5. A baggage transfer conveyer unit according to Claim 4, wherein said body when seen in the side view has a substantially trapezoid shape.

6. A baggage transfer conveyer unit according to any one of the preceding claims, said baggage carousel comprising a moveable carousel belt, wherein the baggage transfer conveyor unit is configured to be mounted over said belt slightly spaced upwardly therefrom, such that:

- continuous baggage flow is maintained along said carousel transferring path and said conveyer unit transferring path; and
- movement of the carousel belt under the conveyer unit is allowed.

7. A baggage transfer conveyer unit according to any one of the preceding claims, further comprising a mounting arrangement for mounting thereover said baggage carousel.

8. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the diverting mechanism is configured for changing the direction of the baggage with respect to the conveyer transferring path.

9. A baggage transfer conveyer unit according to Claim 1, wherein the diverting mechanism is configured for moving the baggage along said diverted direction.

10. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the diverted direction forms an angle with said conveyer transferring path.

11. A baggage transfer conveyer unit according to any one of the preceding claims, further comprising a diverting surface from which the baggage is diverted by means of the diverting mechanism.

12. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the diverting mechanism has a diverting mode of operation and a transferring mode of operation, such that in the transferring mode the diverting mechanism together with the transferring mechanism cause the upper surface of the conveyer unit to transfer the baggage along said conveyor unit transferring path from the proximal end of the unit to the distal end of the unit, and in the diverting mode the diverting mechanism causes a part of the upper surface of the conveyer unit to divert the baggage along said diverted direction.

13. A baggage transfer conveyer unit according to any one of the preceding claims, wherein said part of the upper surface of the conveyer unit is constituted by a plurality of rollers each having a roller axis and being configured for rotating about said axis, said rollers being arranged such that their axes are parallel and such that they are all rotatable in the same direction, wherein the diverting mechanism is configured for pivoting said rollers between a position in which their axes are perpendicular to the conveyor transferring path when the diverting mechanism is in said

transferring mode and a position, in which their axes are oriented differently than being perpendicular to the conveyor transferring path when the diverting mechanism is in said diverting mode.

14. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the diverting mechanism is configured to have an activated mode in which it causes a part of the upper surface of the conveyer unit to divert the baggage from the conveyor transferring path and an inactivated mode in which the diverting mechanism is not in operation.

15. A baggage transfer conveyer unit according to Claim 14, further comprising a belt crank assembly having a plurality of straps constituting said part of the upper surface and oriented such that their longitudinal direction is substantially perpendicular to the conveyor transferring path.

16. A baggage transfer conveyer unit according to any one of the preceding claims, further comprising an activation means for activating the diverting mechanism.

17. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the upper surface comprises one or more moving elements which are movable for advancing the baggage along the conveyor transferring path, wherein the transferring mechanism is configured for moving said one or more moving elements in a direction and at speed corresponding to those of the movement of the carousel along the carousel transferring path.

18. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the upper surface of the conveyer unit comprises a plurality of transferring rollers having parallel axes perpendicular to the conveyor transferring path and rotatable about these axes in the same direction.

19. A baggage transfer conveyer unit according to any one of the preceding claims, wherein the proximal and distal surface portions of the upper surface are each constituted by a transferring belt.

20. A baggage sorting system for sorting a baggage disposed on a baggage carousel having a carousel transferring path for transferring the baggage therealong:

- a baggage identification unit configured for identifying the baggage based on an identifying data thereof;
- at least one baggage transfer conveyor unit of any one of the preceding claims; and
- a control unit configured for matching between the baggage and one of said at least one baggage transfer conveyors based on information received from said baggage identification unit and for activating the diverting mechanism of said baggage transfer

conveyor when the baggage reaches a predefined position on said one of said at least one baggage transfer conveyors.