CLAIMS

1. Thrust system (300), comprising :

- a thrust engine (302) oriented in a substantially vertical direction to provide vertical take-off and landing capability and configured to provide a thrust output substantially along a first axis;
- a deflector assembly (304) movably coupled to the thrust engine,

characterized in that the deflector assembly (304) includes a pair of deflecting guides (306a,306b), each deflecting guides (306a, 306b) of said pair of deflecting guides being independently movable one from another to selectively deflect a portion of one of ~~said~~ one or more exhausted fluid outputs (302b) to divert said one of said one or more exhausted fluid outputs into at least two thrust vectors angled (α) with respect to the first axis (314), and wherein the deflecting guides are displaceable toward and away from each other between a closed configuration in which the deflecting guides are juxtaposed against one another and are within a path of the exhausted fluid output, and an open configuration in which the deflecting guides are apart and out of the path of the exhausted fluid output.

2. Thrust system (300) according to Claim 1, wherein at least two thrust vectors all have substantially the same magnitude.

3. Thrust system (300) according to any of Claims 1 or 2, wherein each thrust vector is angled (α) between 45 degrees and 90 degrees with respect to the first axis (314).

4. Thrust system (300) according to any of Claims 1 to 3, wherein each thrust vector has substantially the same angle (α) with respect to the first axis (314).

5. Thrust system (300) according to any of Claims 1 to 4, further comprising at least two actuators (310) coupled to the respective deflecting guides (306a, 306b) to controllably adjust a position of the respective deflecting guides (306a, 306b) with respect to the thrust engine (302).

6. Thrust system (300) according to Claim 5, further comprising a controller in communication with the at least two actuators (310), wherein the controller is configured to operate the at least two actuators (310) in response to one or more signals from at least one of an operator (1) and a sensor.

7. Thrust system (300) according to any of Claims 1 to 6, wherein the respective deflecting guides

(306a,306b) are each substantially planar and oriented in a plane substantially perpendicular to the first axis.

8. Thrust system (300) according to Claim 7, wherein the deflecting guides (306a,306b) are movable towards and away from one another within the plane.

9. Thrust system (300) according to any of Claims 1 to 6, wherein the deflecting guides (306a,306b) each define a substantially curvilinear surface that deflects said one of said one or more exhausted fluid outputs.

10. Thrust system (300) according to any of Claims 1 to 6, wherein the deflecting guides (306a,306b) each define a surface having a substantially semi-circular cross-section that deflects said one of said one or more exhausted fluid outputs.

11. Thrust system (300) according to any of Claims 1 to 10, wherein the deflecting guides (306a,306b) are pivotable with respect to the thrust engine.

12. Thrust system (300) according to any of Claims 1 to 11, wherein the deflecting guides (306a,306b) are pivotable about a second axis substantially perpendicular to the first axis (314).

13. Thrust system (300) according to Claim 12, wherein the second axis is located above the thrust output of the thrust engine.

14. Thrust system (300) according to any of Claims 1 to 13, wherein the thrust engine (302) is one of a turbojet engine, a turbofan engine, and a turboprop engine.

15. Propulsion device (10), comprising :

- a platform (11) configured to support a passenger thereon;
- a thrust system (300) coupled to the platform (11), wherein the thrust system (300) is configured to provide a thrust output substantially along a first axis (314);

characterized in that the thrust system (300) is according to any of the claims 1 to 14.