

CLAIMS

1. Thrust system (300), comprising :
 - a thrust engine (302) configured to provide a thrust output substantially along a first axis;
 - a deflector assembly (304) movably coupled to

5 the thrust engine,

characterized in that the deflector assembly (304) includes a pair of deflecting guides (306a,306b) cooperatively movable to selectively deflect a portion of the thrust output (302b) and is

10 configured to divert the thrust output into at least two thrust vectors angled (α) with respect to the first axis (314).
2. Thrust system (300) according to Claim 1, wherein

15 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

20 approximately 45 degrees and approximately 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

25 same angle (α) with respect to the first axis (314).

5. Thrust system (300) according to any of Claims 1 to 4, further comprising an actuator (310) coupled to

the deflecting guides (306a, 306b) to controllably adjust a position of the deflecting guides with respect to the thrust engine (302).

- 5 6. Thrust system (300) according to Claim 5, further comprising a controller in communication with the actuator (310), wherein the controller is configured to operate the actuator (310) in response to one or more signals from at least one
10 of an operator (1) and a sensor.
- 15 7. Thrust system (300) according to any of Claims 1 to 6, wherein the deflecting guides (306a, 306b) are each substantially planar and oriented in a plane substantially perpendicular to the first axis.
- 20 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.
- 25 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 the thrust output.
- 30 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 the thrust output.

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