WHAT IS CLAIMED IS:

1. An apparatus for controlling the temperature of an object, comprising:

a housing comprising:

a cavity adapted to accept an object,

an air inlet configured to allow air to flow into the cavity, and

an air outlet configured to allow air to flow out of the cavity; and

a nest configured to hold the object within the housing such that the smallest planar dimension of the object is substantially aligned with the smallest planar dimension of the cavity;

wherein the nest and housing are adapted to direct air flow from the air inlet, substantially in parallel across at least one surface of the object and in the direction of the smaller dimension of the at least one surface, to the air outlet.

2. The apparatus of claim 1, wherein the aspect ratio of the largest planar surface of the housing is greater than 2:1.

3. The apparatus of claim 1, wherein the nest is adapted to be removable from the housing.

4. The apparatus of claim 1, further comprising a heating element disposed in the path between the air inlet and the object.

5. The apparatus of claim 1, further comprising a temperature sensor.

6. The apparatus of claim 1, wherein the smallest planar dimension of the cavity is substantially parallel to the smallest planar dimension of the housing.

7. The apparatus of claim 1, wherein the air inlet is placed in the smallest planar dimension of the cavity.

8. The apparatus of claim 7, wherein the air outlet is placed so the air flow from the air inlet to the air outlet is along the longest axis of the cavity.

9. The apparatus of claim 1, wherein the angle between the smallest planar surface of the object and the smallest planar surface of the cavity is less than 20 degrees.

10. An apparatus for controlling the temperature of an object, comprising:

a housing comprising:

a cavity adapted to accept the object,

an air inlet configured to allow air to flow into the cavity, and

an air outlet configured to allow air to flow out of the cavity; and

a nest configured to hold the object within the housing such that the largest linear dimension of the object is substantially aligned with the diagonal of the largest planar dimension of the cavity;

wherein the nest and housing are adapted to direct air flow from the air inlet, substantially in parallel across at least one surface of the object and in the direction of the smaller dimension of the at least one surface, to the air outlet.

11. The apparatus of claim 10, wherein the aspect ratio of the largest planar surface of the housing is greater than 2:1.

12. The apparatus of claim 10, wherein the nest is adapted to be removable from the housing.

13. The apparatus of claim 10, further comprising a heating element disposed in the path between the air inlet and the object.

14. The apparatus of claim 10, further comprising a temperature sensor.

15. The apparatus of claim 10, wherein the nest and housing are further adapted to provide a substantially wedge-shaped air inlet plenum between the air inlet and the object.

16. The apparatus of claim 10, wherein the nest and housing are further adapted to provide an air plenum with a progressively reduced cross-sectional area disposed between the housing and the at least one surface of the object.

WHAT IS CLAIMED IS:

1. An apparatus for controlling the temperature of an object, comprising:

a housing comprising:

a cavity configured adapted to accept the object, with the cavity comprising a first planar dimension and a second planar dimension, with the first planar dimension of the cavity being smaller than the second planar dimension of the cavity;

wherein the object comprises a first planar dimension and a second planar dimension, with the first planar dimension of the object being smaller than the second planar dimension of the object;

an air inlet configured to allow air to flow into the cavity; and

an air outlet configured to allow air to flow out of the cavity; and

a nest configured to hold the object within the housing such that the first, smaller planar dimension of the object is substantially aligned with the first, smaller planar dimension of the cavity;

wherein the nest and the housing are configured to direct air flow from the air inlet, across at least one surface of the object and substantially in parallel with the first, smaller planar dimension of the object, to the air outlet.

2. The apparatus of claim 1, wherein an aspect ratio of the largest planar surface of the housing is greater than 2:1.

3. The apparatus of claim 1, wherein the nest is configured to be removable from the housing.

4. The apparatus of claim 1, further comprising a heating element disposed in a path between the air inlet and the object, with the heating element differing from the object.

5. The apparatus of claim 1, further comprising a temperature sensor.

6. The apparatus of claim 1, wherein the first, smaller planar dimension of the cavity is substantially parallel to a smallest planar dimension of the housing.

7. The apparatus of claim 1, wherein the air inlet is placed in the first, smaller planar dimension of the cavity.

8. The apparatus of claim 7, wherein the air outlet is placed so the air flow from the air inlet to the air outlet is along a longest axis of the cavity.

9. The apparatus of claim 1, wherein an angle between the first, smaller planar dimension of the object and the first, smaller planar dimension of the cavity is less than 20 degrees.

10. An apparatus for controlling the temperature of an object, comprising:

a housing comprising:

a cavity configured to accept the object, with the cavity comprising a first planar dimension and a second planar dimension, with the first planar dimension of the cavity being larger than the second planar dimension of the cavity;

wherein the object comprises at least one surface with a first linear dimension and a second linear dimension, with the first linear dimension of the at least one surface of the object being larger than the second linear dimension of the at least one surface of the object;

an air inlet configured to allow air to flow into the cavity; and

an air outlet configured to allow air to flow out of the cavity; and

a nest configured to hold the object within the housing such that the first, larger linear dimension of the at least one surface of the object is substantially aligned with a diagonal of the first, larger planar dimension of the cavity;

wherein the nest and the housing are configured to direct air flow from the air inlet, across the at least one surface of the object and substantially in parallel with the second, smaller linear dimension of the at least one surface of the object, to the air outlet.

11. The apparatus of claim 10, wherein an aspect ratio of the largest planar surface of the housing is greater than 2:1.

12. The apparatus of claim 10, wherein the nest is configured to be removable from the housing.

13. The apparatus of claim 10, further comprising a heating element disposed in a path between the air inlet and the object, with the heating element differing from the object.

14. The apparatus of claim 10, further comprising a temperature sensor.

15. The apparatus of claim 10, further comprising: a substantially wedge-shaped air inlet plenum between the air inlet and the object.

16. The apparatus of claim 10, further comprising: an air plenum with a progressively reduced cross-sectional area disposed between the housing and the at least one surface of the object.