CLAIMS:

1. An airfoil comprising:

a leading edge and a trailing edge;

a suction surface and a pressure surface, the suction surface and the pressure surface both extending axially between the leading edge and the trailing edge, as well as radially from a root section to a tip section of the airfoil;

a cooling passageway located between the suction surface and the pressure surface; and

a plurality of oblong pedestals connecting the suction surface to the pressure surface, the oblong pedestals having a cut downstream end terminating at the trailing edge of the airfoil.

2. The airfoil of claim 1, wherein the plurality of oblong pedestals are axially elongated.

3. The airfoil of claim 1, wherein each of the plurality of oblong pedestals has an axial length greater than 1.5 times a hydraulic diameter.

4. The airfoil of claim 3, wherein the plurality of oblong pedestals are arranged in a radial column.

5. The airfoil of claim 1, wherein each of the plurality of oblong pedestals is aligned such that the cooling fluid exiting the airfoil aligns with the local gaspath streamlines.

6. The airfoil of claim 1, wherein each of the plurality of oblong pedestals includes a curved axially upstream end and an angular axially downstream end.

7. The airfoil of claim 6, wherein the curved axially upstream end and the angular axially downstream end are connected by two substantially parallel sides.

8. The airfoil of claim 6, wherein each of oblong pedestals tapers from the curved axially upstream end and the angular axially downstream end.

9. A component for a gas turbine engine, the component comprising:

an airfoil including a convex surface and a concave surface, both the convex surface and the concave surface extending radially from an inner diameter to an outer diameter and axially from a leading edge to a trailing edge, wherein an internal chamber is defined between the convex surface and the concave surface; and

a cooling passageway extending axially through the internal chamber and having an outlet at the trailing edge, wherein a radial column of axially elongated

pedestals is positioned at the outlet, such that the pedestals terminate at an exit plane of the trailing edge cooling passageway.

10. The component of claim 9, wherein each elongated pedestal has a curved upstream end and a blunt downstream end.

11. The component of claim 10, wherein the blunt downstream end terminates at the trailing edge of the airfoil.

12. The component of claim 11, further comprising:

a first radial column of first cylindrical pedestals positioned within the cooling passageway upstream of the radial column of axially elongated pedestals.

13. The component of claim 11, wherein the elongated pedestals have diameters approximately equal to diameters of the first cylindrical pedestals.

14. The component of claim 12, further comprising:

a second radial column of second cylindrical pedestals positioned within the cooling passageway upstream of the first radial column of cylindrical pedestals.

15. The component of claim 14, wherein the second cylindrical pedestals have diameters equal to or greater than diameters of the first cylindrical pedestals.

16. The component of claim 14, wherein the second cylindrical pedestals have diameters about 1.5 times greater than diameters of the first cylindrical pedestals.

17. The component of claim 9, wherein the airfoil is a blade.

18. The component of claim 9, wherein the airfoil is a vane.

19. A method of manufacturing an airfoil, the method comprising:

forming a pedestal to include an rounded upstream end, a rounded downstream end, and tapered side walls connecting the upstream end to the downstream end; and

coating the pedestal with a thermal coating thereby converting the tapered side walls into parallel side walls connecting the upstream end to the downstream end.

20. The method of claim 19, further comprising:

severing the rounded downstream end to form a blunt downstream end.

21. The method of claim 19, wherein the airfoil is a blade.

## CLAIMS

1. An airfoil comprising:

a leading edge and a trailing edge;

a suction surface and a pressure surface, the suction surface and the pressure surface both extending axially between the leading edge and the trailing edge, as well as radially from a root section to a tip section of the airfoil;

a cooling passageway located between the suction surface and the pressure surface; and

a plurality of oblong pedestals connecting the suction surface to the pressure surface, the oblong pedestals having a cut downstream end perpendicular to a directly adjacent flowpath of the cooling passageway and connecting a downstream end of the pressure surface and a downstream end of the suction surface, the oblong pedestals terminating at the trailing edge of the airfoil.

2. The airfoil of claim 1, wherein the plurality of oblong pedestals are axially elongated.

3. The airfoil of claim 1, wherein each of the plurality of oblong pedestals has an axial length greater than 1.5 times a hydraulic diameter.

4. The airfoil of claim 3, wherein the plurality of oblong pedestals are arranged in a radial column.

5. The airfoil of claim 1, wherein each of the plurality of oblong pedestals is aligned such that a cooling fluid exiting the airfoil aligns with local gaspath streamlines.

**6**. The airfoil of claim **1**, wherein each of the plurality of oblong pedestals includes a curved axially upstream end and an angular axially downstream end.

**7**. The airfoil of claim **6**, wherein the curved axially upstream end and the angular axially downstream end are connected by two substantially parallel sides.

**8**. The airfoil of claim **6**, wherein each of oblong pedestals tapers from the curved axially upstream end and the angular axially downstream end.

**9**. A component for a gas turbine engine, the component comprising:

an airfoil including a pressure surface and suction surface, both the pressure surface and the suction surface extending radially from an inner diameter to an outer diameter and axially from a leading edge to a trailing edge, wherein an internal chamber is defined between the pressure surface and the suction surface; and

a cooling passageway extending axially through the internal chamber and having an outlet at the trailing edge, wherein a radial column of axially elongated pedestals includes at least one pedestal having a downstream end perpendicular to a directly adjacent flowpath of the cooling passageway such that the downstream end of the at least one pedestal terminates at an exit plane of the trailing edge cooling passageway.

**10**. The component of claim **9**, wherein each elongated pedestal has a curved upstream end and a blunt downstream end.

**11**. The component of claim **10**, wherein the blunt downstream end terminates at the trailing edge of the airfoil.

**12**. The component of claim **11**, further comprising:

a first radial column of first cylindrical pedestals positioned within the cooling passageway upstream of the radial column of axially elongated pedestals.

**13**. The component of claim **12**, wherein the elongated pedestals have diameters equal to diameters of the first cylindrical pedestals.

**14**. The component of claim **12**, further comprising:

a second radial column of second cylindrical pedestals positioned within the cooling passageway upstream of the first radial column of cylindrical pedestals.

**15**. The component of claim **14**, wherein the second cylindrical pedestals have diameters equal to or greater than diameters of the first cylindrical pedestals.

**16**. The component of claim **14**, wherein a diameter ratio of the second cylindrical pedestals to the first cylindrical pedestals is between about 2:1 and 1:1.

**17**. The component of claim **14**, wherein the radial column of axially elongated pedestals is aligned such that slots formed between pedestals are parallel to an external airfoil local trailing edge surface momentum boundary layer streamline.

**18**. The component of claim **14**, wherein the radial column of axially elongated pedestals are aligned such that a first slot formed between a first pair of adjacent pedestals is oriented in a direction substantially parallel to a second slot formed between a second pair of adjacent pedestals.

**19**. A method of manufacturing an airfoil, the method comprising:

forming a pedestal to include a rounded upstream end, a rounded downstream end, and tapered side walls connecting the upstream end to the downstream end;

coating the pedestal with a thermal coating thereby converting the tapered side walls into parallel side walls connecting the upstream end to the downstream end; and

severing the rounded downstream end to form a blunt downstream end;

wherein the blunt downstream end is perpendicular to a directly adjacent flowpath of a cooling passageway located between a suction surface and a pressure surface of the airfoil.

**20**. The method of claim **19**, wherein the airfoil is a blade.