

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for conditioning ~~the temperature~~a temperature of at least one fluid stream that is passed through a fuel cell stack, the system comprising:

a system module disposed upstream of the fuel cell stack and operable to humidify ~~the an an~~ anode stream and a cathode stream;

a fuel cell stack adapted to receive the anode stream and the cathode stream, the fuel cell stack having at least one outlet that provides coolant in response to receiving the anode stream and the cathode stream; and

a conditioning device operable to receive the anode stream, the cathode stream, and the coolant to change the temperature of the anode stream and the cathode stream with the coolant, the conditioning device comprising:

an outer shell defining a cavity therein;

a first pipe extending through the cavity to deliver the anode stream to the fuel cell stack at a first temperature;

a second pipe extending through the cavity to deliver the cathode stream to the fuel cell stack at a second temperature; and

an input port coupled to the outer shell to deliver the coolant from the fuel cell stack to the first pipe and to the second pipe to change the first temperature of the anode stream and the second temperature of the cathode stream.

2-21. (Canceled)

22. (Previously Presented) An apparatus in a system for conditioning a temperature of at least one fluid stream that is passed through a fuel cell stack, the system including a system module operable to humidify an anode stream and a cathode stream and a fuel

cell stack adapted to receive the anode stream and the cathode stream and to provide coolant, the apparatus comprising:

a conditioning device operable to receive the anode stream, the cathode stream and the coolant to change a temperature of the anode stream and the cathode stream with the coolant, the conditioning device comprising:

an outer shell defining a cavity therein;

a first pipe extending through the cavity to deliver the anode stream to a fuel cell stack at a first temperature;

a second pipe extending through the cavity to deliver the cathode stream to the fuel cell stack at a second temperature; and

an input port being coupled to the outer shell to receive the coolant and to deliver the coolant into the cavity to change the first temperature of the anode stream and the second temperature of the cathode stream.

23-26. (Canceled)

27. (Currently Amended) An apparatus in a system for conditioning ~~the~~ temperature ~~a temperature~~ of at least one fluid stream that is passed through a fuel cell stack, the system including a system module operable to humidify an anode stream and a cathode stream and a fuel cell stack adapted to receive the ~~the anode-anode~~ stream and the cathode stream and to provide coolant, the apparatus comprising:

a conditioning device operable to receive the anode stream, the cathode stream and the coolant, and to change a temperature of the anode stream and the cathode stream with the coolant, the conditioning device comprising:

an outer shell forming a cavity;

a first pipe extending through the cavity to deliver the anode stream at a first temperature;

an input port coupled to the outer shell to deliver coolant to the first pipe to change the first temperature of the anode stream; and

a temperature sensor positioned on an exterior of the outer shell and in fluid communication with the anode stream to measure the first temperature.

28-30. (Canceled)

31. (Previously Presented) The system of claim 1 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the conditioning device.

32. (Previously Presented) The system of claim 1 wherein the conditioning device further comprises a first temperature sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure the first temperature.

33. (Previously Presented) The system of claim 32 wherein the first temperature sensor is configured to transmit a temperature signal indicative of the measured first temperature to a controller to control an amount of coolant that is delivered to the first pipe.

34. (Previously Presented) The system of claim 32 wherein the conditioning device further comprises a second temperature sensor positioned on the exterior section of outer shell and being in fluid communication with the cathode stream in the second pipe to measure the second temperature.

35. (Previously Presented) The system of claim 34 wherein the second temperature sensor is configured to transmit a temperature signal indicative of the measured second temperature to a controller to control an amount of coolant that is delivered to the second pipe.

36. (Previously Presented) The system of claim 1 wherein the conditioning device further comprises a first humidity sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure an amount of water within the anode stream.

37. (Previously Presented) The system of claim 36 wherein the conditioning device further comprises a second humidity sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure an amount of water within the cathode stream.

38. (Previously Presented) The system of claim 1 wherein the conditioning device is positioned exterior to the fuel cell stack.

39. (Previously Presented) The system of claim 1 wherein the conditioning device is positioned interior to the fuel cell stack.

40. (Previously Presented) The apparatus of claim 22 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the conditioning device.

41. (Previously Presented) The apparatus of claim 22 wherein the conditioning device further comprises a first temperature sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure the first temperature.

42. (Previously Presented) The apparatus of claim 41 wherein the first temperature sensor is configured to transmit a temperature signal indicative of the measured first temperature to a controller to control an amount of coolant that is delivered to the first pipe.

43. (Previously Presented) The apparatus of claim 41 wherein the conditioning device further comprises a second temperature sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure the second temperature thereof.

44. (Previously Presented) The apparatus of claim 43 wherein the second temperature sensor is configured to transmit a temperature signal indicative of the measured

second temperature to a controller to control an amount of coolant that is delivered to the second pipe.

45. (Previously Presented) The apparatus of claim 22 wherein the conditioning device further comprises a first humidity sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure an amount of water within the anode stream.

46. (Previously Presented) The apparatus of claim 45 wherein the conditioning device further comprises a second humidity sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure an amount of water within the cathode stream.

47. (Previously Presented) The apparatus of claim 27 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the device.