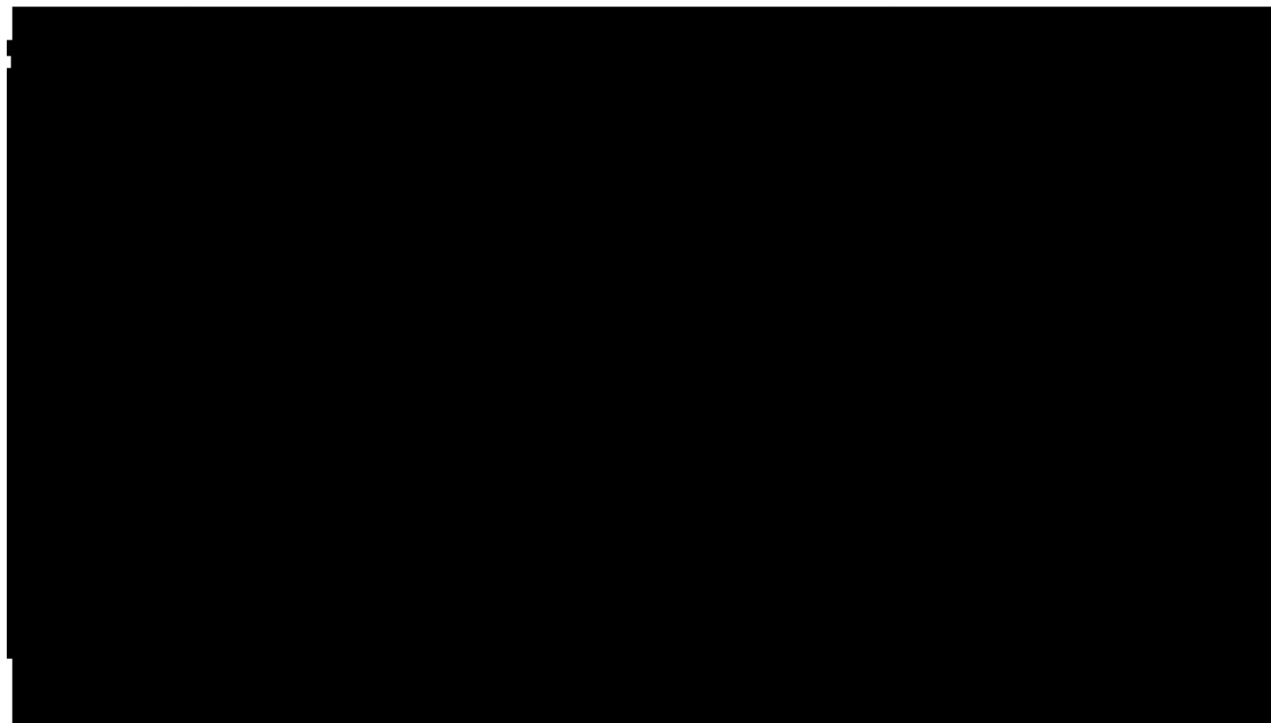


US Patent 10,357,628: Removable Cartridge For Oxygen Concentrator
GCE Zen-O Lite System

Claim 1:

A portable oxygen concentrator,
comprising: a cartridge module
comprising a housing, the
housing defining a receptacle;



[REDACTED]

[REDACTED]

	[REDACTED]
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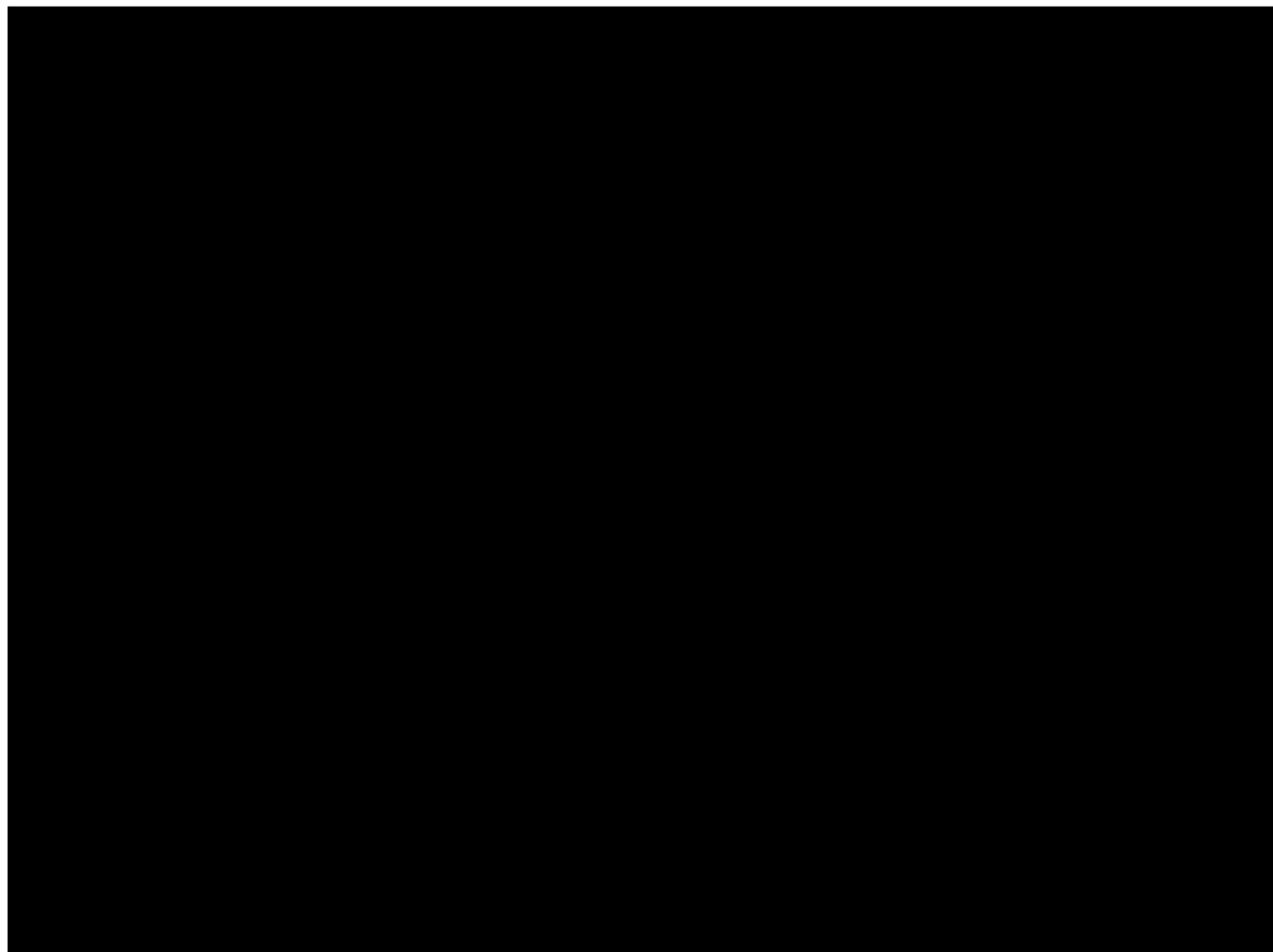
[REDACTED]

a separation cartridge selectively removable from the receptacle by movement relative to the receptacle in a first direction,

[REDACTED]

the separation cartridge comprising a case at least partially defining an outer volume of the separation cartridge, an inlet oriented in a second direction opposite the first direction, an outlet oriented in the second direction, and a bed of adsorbent material configured to preferentially adsorb nitrogen,

the case at least partially
surrounding the bed of adsorbent
material; a power pack
removable from the portable
oxygen concentrator;



[REDACTED]

a pump electrically coupled to the power pack, the pump operable to cause a flow of fluid to move relative to the adsorbent material;

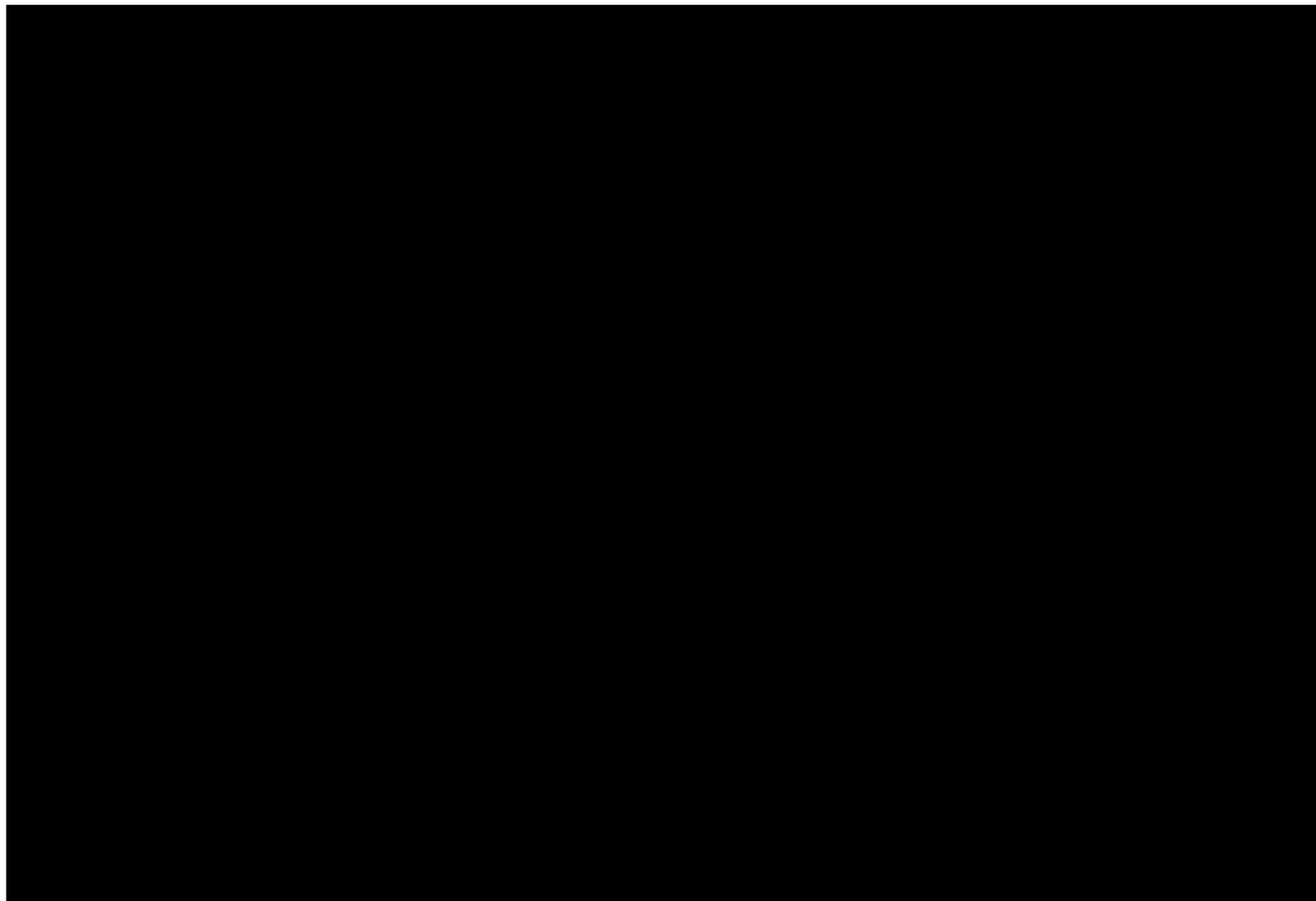
[REDACTED]

[REDACTED]

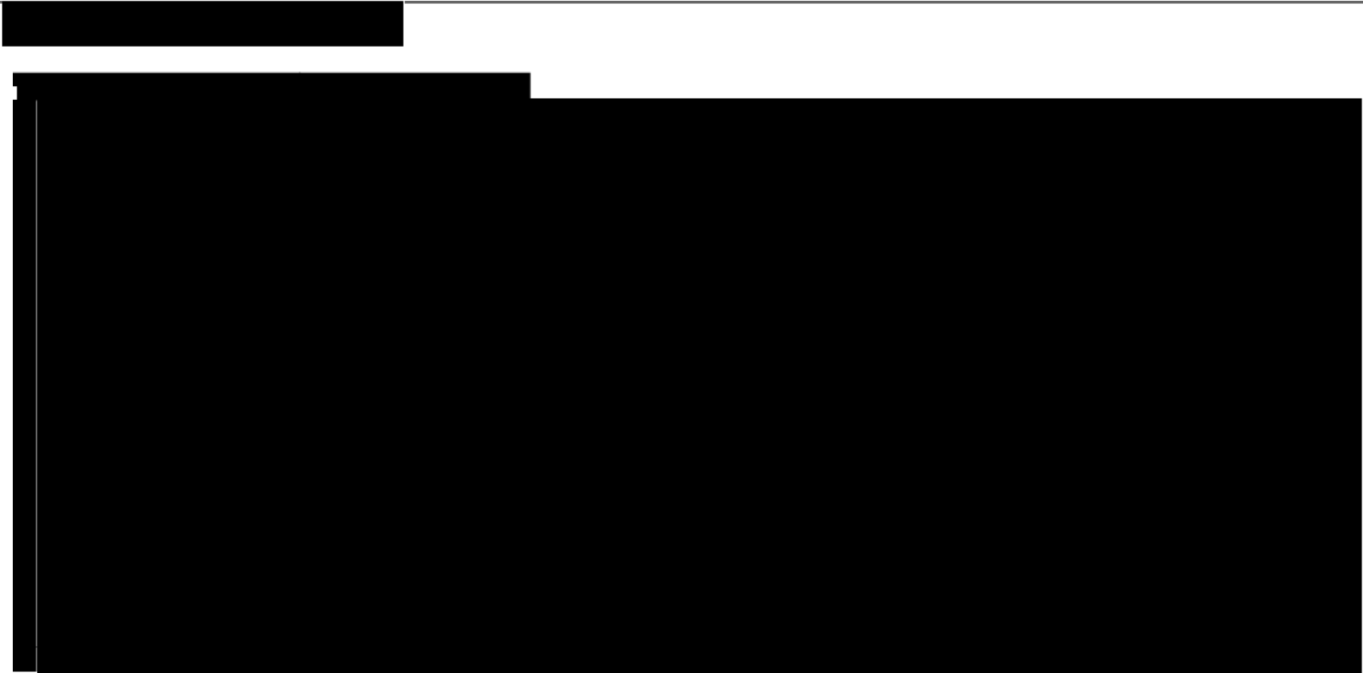
a user interface configured to allow a patient to adjust and monitor operation of the portable oxygen concentrator; a carrying device for transporting the portable oxygen concentrator;

[REDACTED]

wherein the housing of the cartridge module is configured to at least partially surround the case of the separation cartridge,



wherein the bed of adsorbent material is disposed along an axis, one of the inlet and the outlet is disposed along the axis, and the other of the inlet and the outlet is spaced-apart from the axis, and wherein the first direction and the second direction are substantially parallel to the axis.

	
Claim 11: A portable oxygen concentrator, comprising: a cartridge module comprising a housing, the housing defining a receptacle;	

[REDACTED]

[REDACTED]

	[REDACTED]
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[REDACTED]

a separation cartridge selectively removable from the receptacle by movement relative to the receptacle in a first direction,

[REDACTED]

the separation cartridge comprising an inlet oriented in a second direction opposite the first direction, an outlet oriented in the second direction, and a bed of adsorbent material configured to preferentially adsorb nitrogen;

[REDACTED]

and a power pack removable
from the portable oxygen
concentrator,

[REDACTED]

wherein the bed of adsorbent material is disposed along an axis, wherein one of the inlet and the outlet is disposed along the axis, wherein the other of the inlet and the outlet is spaced-apart from the axis, and wherein the first direction and the second direction are substantially parallel to the axis.

[REDACTED]

[REDACTED]

	[REDACTED]
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