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**United States Patent**

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*Michelle K. Lee*

*Deputy Director of the United States Patent and Trademark Office*



US009242065B2

(12) **United States Patent**  
**Hunt et al.**

(10) **Patent No.:** **US 9,242,065 B2**  
(45) **Date of Patent:** **\*Jan. 26, 2016**

(54) **APPARATUS, SYSTEMS AND METHOD FOR COLLECTING AND RECLAIMING ANAESTHETIC AGENTS AND FOR REMOVING NITROUS OXIDE FROM EXHAUST GASES**

Y10T 137/7736; Y10T 137/0324; Y10T 137/7761; B01D 53/02; B01D 53/047; B01D 53/22; B01D 53/261; B01D 53/56; B01D 53/75; B01D 2257/102; B01D 2257/104; B01D 2257/504; B01D 2259/4508; B01D 2259/4533; Y02C 20/10  
USPC ..... 137/467.5, 487.5, 2; 128/205.12, 128/205.15, 205.27  
See application file for complete search history.

(71) Applicant: **Class 1 Inc.**, Cambridge (CA)

(72) Inventors: **Barry W. Hunt**, Kitchener (CA); **Todd Eric Jarrett**, Burlington (CA); **Damian Ross Thorne**, Kitchener (CA); **Katrina Marie Ahchong**, Toronto (CA); **Dean Paul Carr**, Kitchener (CA); **Cesar Laurentino Martinez Vazquez**, Cambridge (CA)

(73) Assignee: **Class 1 Inc.**, Cambridge, Ontario (CA)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 140 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **13/866,349**

(22) Filed: **Apr. 19, 2013**

(65) **Prior Publication Data**

US 2013/0220330 A1 Aug. 29, 2013

**Related U.S. Application Data**

(60) Continuation of application No. 13/231,718, filed on Sep. 13, 2011, now Pat. No. 8,430,099, which is a

(Continued)

(51) **Int. Cl.**

*A61M 16/20* (2006.01)

*A61M 16/01* (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC ..... *A61M 16/20* (2013.01); *A61M 16/009* (2013.01); *A61M 16/0093* (2014.02);

(Continued)

(58) **Field of Classification Search**

CPC ..... A61M 16/0066; A61M 16/009; A61M 16/0093; A61M 16/01; A61M 16/0808; A61M 16/20; A61M 16/105; A61M 2202/0208; A61M 2202/0241; A61M 2202/0275; A61M 2202/0283; A61M 2202/062; A61M 2205/3653; Y10T 137/7722;

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*Primary Examiner* — William McCalister

(74) *Attorney, Agent, or Firm* -- Bereskin & Parr LLP/S.E.N.C.R.L., s.r.l.

(57)

**ABSTRACT**

A system for collecting an anaesthetic agent, having at least one anaesthetic gas scavenging system (AGSS) for receiving exhaust gas from a plurality of sources, the exhaust gas including the anaesthetic agent to be collected, each AGSS comprising at least one power source for providing suction of the exhaust gas from the plurality of sources under negative pressure, and a central collection system for receiving the exhaust gas, the central collection system comprising at least one collector for collecting the anaesthetic agent from the exhaust gas, wherein the at least one collector is configured to adsorb the anaesthetic agent from the exhaust gas. The central collection system may be configured to received the exhaust gases from the at least one AGSS, with the central collection system being located downstream of the at least one AGSS.

**17 Claims, 14 Drawing Sheets**

