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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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Jon W. I. Dudas

Director of the United States Patent and Trademark Office



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(12) **United States Patent**
Lin

(10) **Patent No.:** **US 7,393,453 B2**
(45) **Date of Patent:** **Jul. 1, 2008**

(54) **METHOD FOR ANALYSIS OF PERCHLORATE**

(58) **Field of Classification Search** 210/635,
210/656, 683, 198.2, 502.1, 902; 436/161;
73/61.52

(76) **Inventor:** **Kham Lin**, 121 Panorama Hills Circle
NW, Calgary, Alberta (CA) T3K 4X5

See application file for complete search history.

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 365 days.

(56) **References Cited**

(21) **Appl. No.:** **11/366,974**

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(22) **Filed:** **Mar. 3, 2006**

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(65) **Prior Publication Data**

US 2006/0144786 A1 Jul. 6, 2006

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Related U.S. Application Data

Primary Examiner—Ernest G Therkorn

(63) Continuation-in-part of application No. 11/036,936,
filed on Jan. 18, 2005, now abandoned.

(57) **ABSTRACT**

(60) Provisional application No. 60/581,710, filed on Jun.
23, 2004.

A method for analyzing the content of perchlorate in a sample matrix comprising the steps of extracting the sample matrix and applying it to a reverse phase column, followed by elution with a mobile phase. The reverse phase column optionally has a protein coating deposited thereon.

(51) **Int. Cl.**
B01D 15/08 (2006.01)

(52) **U.S. Cl.** **210/635; 210/656; 210/198.2;**
210/502.1; 436/161

12 Claims, 1 Drawing Sheet

Perchlorate Internal Standard Calibration

Perchlorate 83/89 Area Ratio

