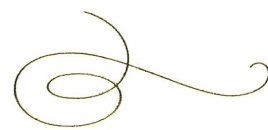


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*The Director*

*of the United States Patent and Trademark Office 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**

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

*Andres Ibanez*

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



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**(12) United States Patent  
Furusaki****(10) Patent No.: US 10,450,210 B2  
(45) Date of Patent: \*Oct. 22, 2019****(54) MINERAL FUNCTIONAL WATER, METHOD  
FOR PRODUCING THE SAME****(71) Applicants: Riken Techno System Co., Ltd.,  
Fukuoka (JP); Santa Mineral Co.,  
Ltd., Tokyo (JP)****(72) Inventor: Koichi Furusaki, Fukuoka (JP)****(73) Assignees: Riken Techno System Co., Ltd.,  
Fukuoka (JP); Santa Mineral Co.,  
Ltd., Tokyo (JP)****(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 32 days.

This patent is subject to a terminal disclaimer.

**(21) Appl. No.: 15/706,053****(22) Filed: Sep. 15, 2017****(65) Prior Publication Data**

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**Related U.S. Application Data****(63) Continuation of application No.**  
PCT/JP2016/058362, filed on Mar. 16, 2016.**(30) Foreign Application Priority Data**

Mar. 17, 2015 (JP) ..... 2015-053971

**(51) Int. Cl.****C02F 1/68** (2006.01)  
**A61K 35/02** (2015.01)  
**A61K 35/614** (2015.01)  
**A61K 35/618** (2015.01)  
**A61K 36/185** (2006.01)  
**A61K 36/20** (2006.01)  
**A61K 36/28** (2006.01)  
**A61K 36/282** (2006.01)  
**A61K 36/73** (2006.01)  
**A61K 36/738** (2006.01)  
**C02F 1/30** (2006.01)  
**C02F 1/36** (2006.01)  
**C02F 1/48** (2006.01)  
**A61K 36/14** (2006.01)**(52) U.S. Cl.**CPC ..... **C02F 1/68** (2013.01); **A61K 35/02**  
(2013.01); **A61K 35/614** (2013.01); **A61K**  
**35/618** (2013.01); **A61K 36/14** (2013.01);  
**A61K 36/185** (2013.01); **A61K 36/20**  
(2013.01); **A61K 36/28** (2013.01); **A61K****36/282** (2013.01); **A61K 36/73** (2013.01);  
**A61K 36/738** (2013.01); **C02F 1/30** (2013.01);  
**C02F 1/36** (2013.01); **C02F 1/48** (2013.01)**(58) Field of Classification Search**

None

See application file for complete search history.

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*Primary Examiner* — Ralph J Gitomer*(74) Attorney, Agent, or Firm* — Nakanishi IP Associates, LLC**(57) ABSTRACT**

Provided is a method of producing mineral function water showing beneficial effects, such as antioxidant effects, or the like. The water including contains mineral-containing water (A) and mineral-containing water (B) according to a ratio of 1:5 to 1:20 (weight ratio), the mineral-containing water (A) containing first mineral components eluted from mineral-impacting material (A) containing: vegetation raw material, woody plant raw material, and sulfur raw material, the mineral-containing water (B) containing second mineral-containing water (B) containing the mineral component eluted from inorganic mineral-impacting material (B).

**3 Claims, 12 Drawing Sheets**