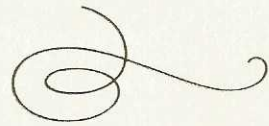
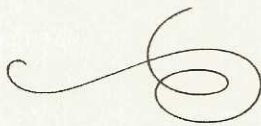


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The Director

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**
Constantinis

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(54) **INSPECTION METHOD**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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PCT Pub. Date: **Nov. 9, 2017**

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(51) **Int. Cl.**

H04N 7/18 (2006.01)

G01N 21/954 (2006.01)

(Continued)

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

CPC **G01N 21/954** (2013.01); **G01M 3/005** (2013.01); **G01M 3/38** (2013.01); **G01S 17/89** (2013.01);

(Continued)

(58) **Field of Classification Search**

CPC combination set(s) only.
See application file for complete search history.

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(57) **ABSTRACT**

A method of inspecting the inside of a vessel. The method includes the step of obtaining a visual image of the inside of the vessel using a camera. The method includes using a first three-dimensional scanner to obtain a low-resolution image of one or more surfaces of the inside of the vessel; and using a second three-dimensional scanner to obtain a high-resolution image of one or more objects inside of the vessel.

18 Claims, 3 Drawing Sheets

