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(12) **EX PARTE REEXAMINATION CERTIFICATE** (8525th)

United States Patent

Pieroni et al.

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(54) **METHOD FOR DETECTING LEAKS IN A FLUID SYSTEM**

6,439,031 B1 8/2002 Pieroni et al.

FOREIGN PATENT DOCUMENTS

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U.S. Appl. No. 09/385,050; Notice of Allowability; May 15, 2002.

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(57) **ABSTRACT**

(51) **Int. Cl.**
G01M 3/20 (2006.01)
G01M 3/22 (2006.01)

A method for detecting leaks in a fluid system such as, but not limited to, the evaporative or air brake system of a motor vehicle. A smoke generating machine produces a supply of smoke to be delivered to the system under test. At least some of a mixture of oil and fluorescent dye is heated and vaporized into smoke within a sealed chamber. The smoke functions as a carrier for the dye. Some of the smoke which is delivered to the system under test from the chamber will exit a leak (e.g. a hole), and the fluorescent dye carried by the smoke will leave a fluorescent trace around the leak. By shining ultraviolet light along the system under test, the fluorescent trace around the leak will be illuminated. Accordingly, even small leaks may be quickly, easily and reliably located for repair.

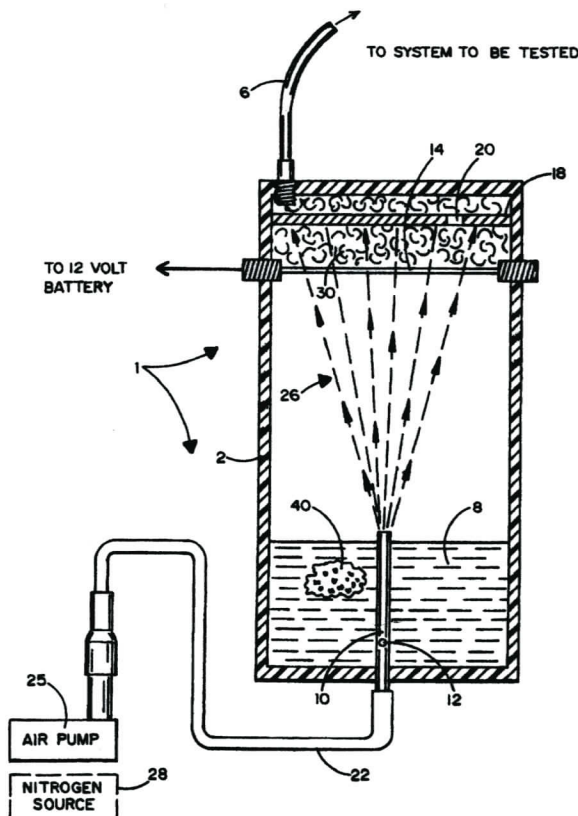
(52) **U.S. Cl.** **73/40.7**

(58) **Field of Classification Search** None
See application file for complete search history.

(56) **References Cited**

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EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307

NO AMENDMENTS HAVE BEEN MADE TO
THE PATENT

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AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

5 The patentability of claims 1-7 is confirmed.

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