



US007094417B2

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

(10) **Patent No.:** **US 7,094,417 B2**
(45) **Date of Patent:** **Aug. 22, 2006**

(54) **FISH HATCHING METHOD AND APPARATUS**

(75) Inventors: **Tommy R. Shedd**, Middletown, MD (US); **Mark W. Widder**, Chambersburg, PA (US); **Eugene Hull**, New York, NY (US)

(73) Assignee: **The United States of America as represented by the Secretary of the Army**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 503 days.

(21) Appl. No.: **10/454,821**

(22) Filed: **Jun. 5, 2003**

(65) **Prior Publication Data**
US 2004/0013608 A1 Jan. 22, 2004

Related U.S. Application Data

(63) Continuation of application No. 09/930,499, filed on Aug. 16, 2001, now abandoned.

(60) Provisional application No. 60/225,788, filed on Aug. 17, 2000.

(51) **Int. Cl.**
A01N 25/02 (2006.01)
(52) **U.S. Cl.** **424/405**; 119/200; 119/201; 119/215; 119/217; 424/9.1; 424/9.2; 435/374
(58) **Field of Classification Search** 424/405, 424/409, 9.1, 9.2; 43/100-105; 119/200-218; 435/374
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,150,126 A * 11/2000 Dodson et al. 435/29

* cited by examiner

Primary Examiner—Neil S. Levy

(74) *Attorney, Agent, or Firm*—Elizabeth Arwine

(57) **ABSTRACT**

The invention is a method and kit for conducting a rapid toxicity test. Methods and kits according to the invention include an animal or plant species in diapause.

21 Claims, 1 Drawing Sheet

