



US007052848B2

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

(10) **Patent No.:** **US 7,052,848 B2**  
(45) **Date of Patent:** **May 30, 2006**

(54) **INTERNAL POSITIVE CONTROL FOR PROBE-BASED NUCLEIC ACID MOLECULE ASSAYS AND METHODS OF MAKING AND USING THEREOF**

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(57) **ABSTRACT**

Disclosed herein are isolated nucleic acid molecules that may be used as an internal positive controls in probe-based nucleic acid assays such as TaqMan® based assays. Also disclosed are probes comprising the isolated nucleic acid molecule of the present invention. The probes may comprise a reporter molecule and a quencher molecule. Also disclosed are assays which comprise using the probe of the present invention. The probes may be used to distinguish false negative results from true negative results in assays for a target nucleic acid molecule. The probe may be used in conjunction with probe-based nucleic acid assays for the detection of an organism such as one belonging to *Bacillus*, *Mycobacterium*, *Francisella*, *Brucella*, *Clostridium*, *Yersinia*, *Variola*, *Orthopox*, or *Burkholderia*.

**21 Claims, 12 Drawing Sheets**

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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 59 days.

(21) Appl. No.: **11/018,377**

(22) Filed: **Dec. 22, 2004**

(65) **Prior Publication Data**

US 2005/0095644 A1 May 5, 2005

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 10/376,323, filed on Mar. 3, 2003.

(60) Provisional application No. 60/361,455, filed on Mar. 4, 2002.

(51) **Int. Cl.**  
**C12Q 1/68** (2006.01)

(52) **U.S. Cl.** ..... **435/6**

(58) **Field of Classification Search** ..... 435/6,  
435/91.1, 91.2

See application file for complete search history.

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