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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, or importing into 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.

Michelle K. Lee

Director of the United States Patent and Trademark Office



US009139883B2

United States Patent

Saluja et al.

Patent No.: US 9,139,883 B2
Date of Patent: Sep. 22, 2015

(54) PCR-BASED DETECTION METHOD FOR *CHLAMYDIA TRACHOMATIS*

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(73) Assignees: University of Delhi (IN); The Secretary, Department of Biotechnology (IN)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 820 days.

(21) Appl. No.: 13/220,268

(22) Filed: Aug. 29, 2011

(65) Prior Publication Data

US 2012/0010089 A1 Jan. 12, 2012

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/064,143, filed as application No. PCT/IN2006/000282 on Aug. 7, 2006, now abandoned.

(30) Foreign Application Priority Data

Aug. 17, 2005 (IN) 1589DEL/2005

(51) Int. Cl.

C12P 19/34

(2006.01)

C12Q 1/68

(2006.01)

U.S. Cl.

C12Q 1/689 (2013.01); *C12Q 2600/16* (2013.01)

(58) Field of Classification Search

None

See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

2006/0246447 A1 11/2006 Inose et al.

FOREIGN PATENT DOCUMENTS

OTHER PUBLICATIONS

Richard S. Stephens, et al., "Genome Sequence of an Obligate Intracellular Pathogen of Humans: *Chlamydia trachomatis*", *Science*, Oct. 1998, pp. 754-759, vol. 282.

Sophie Dessus-Babus et al., "Sequencing of Gyrase and Topoisomerase IV Quinolone-Resistance-Determining Regions of *Chlamydia trachomatis* and Characterization of Quinolone-Resistant Mutants Obtained in Vitro", *Antimicrobial Agents and Chemo-therapy*, Oct. 1998, pp. 2474-2481, vol. 42, No. 10.

Shigeaki Yokoi et al., "Uncommon occurrence of fluororoquinolone resistance-associated alterations in GyrA and ParC in clinical strains of *Chlamydia trachomatis*", *J. Infect. Chemother.*, 2004; pp. 262-267, vol. 10.

Primary Examiner — Suchitra Pande
(74) Attorney, Agent, or Firm — The Webb Law Firm

ABSTRACT

A process for designing of PCR-based detection method for *Chlamydia trachomatis* comprising designing of PCR primers from the genome sequence of *Chlamydia trachomatis* selecting DNA sequence of genes for PCR based diagnostic of *Chlamydia trachomatis*, optimizing the PCR conditions of the PCR primers; subjecting the said genes and primers to the step of characterization.

8 Claims, No Drawings

प्रारूप ओ 2
FORM O-2



बौद्धिक सम्पदा, भारत
Intellectual Property, India



भारत सरकार
GOVERNMENT OF INDIA

व्यापार चिन्ह रजिस्ट्री
TRADE MARKS REGISTRY

क्रमांक No. 919516

व्यापार चिन्ह अधिनियम, 1999
Trade Marks Act, 1999

व्यापार चिन्ह के रजिस्ट्रीकरण का प्रमाणपत्र, धारा 23 (2) नियम 62 (I)

Certificate of Registration of Trade Mark, Section 23 (2), Rule 62 (I)

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Daman Saluja, an Indian National, DR. B.R. AMBEDKAR CENTRE FOR BIOMEDICAL RESEARCH,
UNIVERSITY OF DELHI, SERVICES, (Single Firm)



In Class 10 Under No. 1556672

as of the Date 09 May 2007 in respect of

DIAGNOSTIC KITS.

संलग्न चिन्ह



As Annexed

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के

01st

मास के

February, 2011

Sealed at my direction, this

day of

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Signature

व्यापार चिन्ह रजिस्ट्री

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GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY



ब्लॉक-2, 7 वां तल, सी० जी० ओ० कम्प्लेक्स
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Block-2, 7th Floor C.G.O. Complex
Lodi Road, New Delhi-110003

No.BT/BPFC/04/151/2005

dated 18th May, 2010.

To

Dr (Ms) Daman Saluja,
Director,
Dr. B.R. Ambedkar Centre for Biomedical Research,
University of Delhi,
Delhi-110007

Sub:- Forwarding of Patent Certificate entitled "A multiplex PCR-based process for detecting Chlamydia trachomatis and neisseria gonorrhoeae."

Sir,

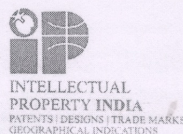
I am directed to forward herewith the Patent Certificate No.011 10693 in respect of your patent application entitled "A multiplex PCR-based process for detecting Chlamydia trachomatis and neisseria gonorrhoeae" which was granted on 09.04.2010 as Patent No.239908 by the Patent Office, Govt. of India.

2. Kindly acknowledge receipt of the Patent Certificate.

Yours faithfully,

Anil Kumar
(Anil Kumar)
Section Officer

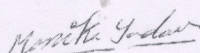
क्रमांक : 011 10693
Sl. No. :



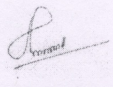
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GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
पेटेंट प्रमाणपत्र
Patent Certificate
(Rule 74 of Patents Rules)

Patent No. : 239908
Application No. : 3437/DEL/2005
Date of Filing : 22/12/2005
Patentee : 1. UNIVERSITY OF DELHI
2. DEPARTMENT OF BIOTECHNOLOGY

It is hereby certified that a patent has been granted to the patentee for an invention entitled A MULTIPLEX PCR-BASED PROCESS FOR DETECTING CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE as disclosed in the above mentioned application for the term of 20 years from the 22 day of DECEMBER 2005, in accordance with the provisions of the Patents Act, 1970.


Controller of Patents

Date of Grant: 09/04/2010


Controller General of Patent,
Design & Trade marks

Note.-The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 22 day of DECEMBER 2007 and on the same day in every year