Filed on behalf of: Party **QUAKE**

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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STEPHEN **QUAKE** and HEI-MUN CHRISTINA FAN
Senior Party
(Patent 8,008,018).

v.

YUK-MING DENNIS **LO**, ROSSA WAI KWUN CHIU, and KWAN CHEE CHAN
Junior Party
(Application 13/070,275),

_____

YUK-MING DENNIS **LO**, ROSSA WAI KWUN CHIU, and KWAN CHEE CHAN
Junior Party
(Applications 12/178,181, 13/070,240, 12/614,350, 13/070,251) (Application 13/417,119),

v.

STEPHEN **QUAKE** and HEI-MUN CHRISTINA FAN
Senior Party
(Application 12/393,833) (Application 12/393,833).

_____

Patent Interference Nos. 105,920, 105,923, 105,924 (DK)
(Technology Center 1600)

_____

DECLARATION OF JOHN CHRISTOPHER DETTER, PH.D.

Filed on behalf of: Party **QUAKE**

By: R. Danny Huntington, Esq.
Sharon E. Crane, Ph.D., Esq.
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YUK-MING DENNIS **LO**, ROSSA WAI KWUN CHIU, and KWAN CHEE CHAN
Junior Party
(Applications 12/178,181, 13/070,240, 12/614,350, 13/070,251) (Application 13/417,119),
v.
STEPHEN **QUAKE** and HEI-MUN CHRISTINA FAN
Senior Party
(Application 12/393,833) (Application 12/393,833).

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Patent Interference Nos. 105,920, 105,923, 105,924 (DK)
(Technology Center 1600)

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DECLARATION OF JOHN CHRISTOPHER DETTER, PH.D.

EXHIBIT 2049
QUAKE v. LO, Interference No. 105,920

1   MAIL STOP INTERFERENCE
2   United States Patent and Trademark Office
3   Patent Trial and Appeal Board
4   Madison Building East
5   600 Dulany Street
6   Alexandria, Virginia 22313

7   The undersigned, John Christopher ("Chris") Detter, Ph.D., does hereby declare and state

8   that:

9   1.   I make the following declaration based upon my knowledge and belief.

10   **My educational and professional background**

11   2.   I earned my B.S. in Biology at Baylor University in 1995 and my Ph.D. in

12   medical sciences (molecular genetics and microbiology) at University of Florida in Gainesville

13   in 1999.

14   3.   After receiving my Ph.D., I worked as the Team and Technical Leader for the

15   Research and Development Genomic Technology Group at the Lawrence Livermore National

16   Laboratory ("LLNL") as part of the Joint Genome Institute from September, 1999 until May,

17   2001, where I developed DNA library creation protocols and methods for high-throughput

18   sequencing for the human genome sequencing project.

19   4.   From May, 2001 until September, 2005, I was the Group Leader in the

20   Genomics/Cloning Technology Group at LLNL, during which time I managed the high-

21   throughput library creation process for the Joint Genome Institute.

22   5.   From September, 2005 until February, 2009, I was the Team Leader for the

23   Sequencing Technology Team at the Joint Genome Technology Group (B-6) at the Los Alamos

24   National Laboratory ("LANL"), during which time I managed a highly automated sequencing

25   team focused on the genome finishing process. Also, from October, 2006 until April, 2007, I

1   was acting Group Leader for the Joint Genome Institute-Genome Technology Group (B-5) in the

2   Bioscience Division of LANL, where I managed a diverse genomic sequencing and

3   computational biology group.

4   6.   Since February, 2008, I have been the Genome Sciences Center Director and

5   Group Leader (B-6) at LANL, where I manage a diverse genomic sequencing and computational

6   biology group of about 45 individuals. In addition, since September, 2011, I have been the

7   Acting Bioscience Deputy Divisional Leader at LANL, in which position I assist the Division

8   Leader in programmatic, strategic and tactical mission areas for Bioscience. As of October

9   2012, I am now the BioThreat, BioDefense Program Director for LANL.

10   7.   I received additional technical training in automated DNA sequencing at Perkin-

11   Elmer Corporation in 1997, at Amersham in 1999, at Applied Biosystems in 2000, at Affymetrix

12   in 2000, at 454 Life Sciences in 2006, and I consider myself to be an expert on high-throughput

13   sequencing on the Roche 454, Illumina and PacBio platforms.

14   8.   I have published numerous scientific research papers in the areas of chromosomal

15   mapping and genome sequencing, as listed on my *curriculum vitae,* which is being submitted

16   with this declaration as Exhibit 2051.

17   9.   I am informed that three patent interferences, identified above, have been declared

18   as follows:

19   •   Interference 105,920 ("the '920 interference") was declared between: (1) U.S. Patent

20   No. 8,008,018, which issued on August 30, 2011 ("the Quake '018 patent"; Exhibit

21   2001) to Stephen Quake and Hei-Mun Christina Fan ("Quake"); and (2) U.S.

22   Application Serial No. 13/070,275, filed on March 23, 2011 ("the Lo '275

1   application"; Exhibit 2006), of Yuk-Ming Dennis Lo, Rossa Wai Kwun Chiu, and

2   Kwan Chee Chan ("Lo"; Paper Nos. 1, 43);

3   • Interference No 105,923 ("the '923 interference") was declared between: (1) U.S.

4   Application Serial No. 12/393,833, which was filed on February 26, 2009 ("the

5   Quake '833 application"; Exhibit 2018) of Stephen Quake and Hei-Mun Christina

6   Fan ("Quake"); and (2) U.S. Application Serial Nos. 12/178,181, filed on July 23,

7   2008 ("the Lo '181 application"; Exhibit 2009), 13/070,240, filed March 23, 2011

8   ("the Lo '240 application"; Exhibit 2069), 12/614,350, filed November 6, 2009 ("the

9   Lo '350 application"; Exhibit 2070) and 13/070,251, filed March 23, 2011 ("the Lo

10   '251 application"; Exhibit 2071), all to Yuk-Ming Dennis Lo, Rossa Wai Kwun

11   Chiu, and Kwan Chee Chan ("Lo"; Paper Nos. 1, 20, 23); and

12   • Interference No 105,924 ("the '924 interference") was declared between: (1) the

13   Quake '833 application (Exhibit 2018); and (2) U.S. Application Serial No.

14   13/417,119, filed on March 9, 2012 ("the Lo '119 application"; Exhibit 2022), Yuk-

15   Ming Dennis Lo, Rossa Wai Kwun Chiu, and Kwan Chee Chan ("Lo"; Paper No. 1).

16   10.   I am informed that in the '920 interference, Quake seeks benefit of the '686

17   application (Exhibit 2004) and the '420 provisional (Exhibit 2005); and that in the '923 and '924

18   interferences, Quake seeks benefit of the '420 provisional (Exhibit 2005).

19   **Independent Witness**

20   11.   I have been retained in this matter by Rothwell, Figg, Ernst & Manbeck, P.C. of

21   Washington, D.C. ("Rothwell").

22   12.   My main contacts at Rothwell are Sharon Crane, Ph.D., Esq., Seth Cockrum,

23   Ph.D., Esq. and Danny Huntington, Esq.

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