EXHIBIT 27

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S.	Patent of:	§	
		§	
	Balasubramanian *et al.*	§	Examiner: Unknown
		§	
Patent No.:	7,232,656 B2	§	Group Art Unit: Unknown
		§	
Issued:	June 19, 2007	§	Appl. No. Unknown
		§	
For:	ARRAYED BIOMOLECULES AND THEIR USE IN SEQUENCING	§	Atty Docket No.: INV850/4-049REUS
		§	
		§	
		§	

MAIL STOP *INTER PARTES* REEXAM
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR INTER PARTES REEXAMINATION OF U.S. PATENT NO. 7,232,656 B2

Dear Sir:

Pursuant to 37 C.F.R. § 1.915(b)(8), the Real Party in Interest, Life Technologies Corporation ("Requester"), hereby respectfully requests reexamination pursuant to 35 U.S.C. §§ 311 *et* seq. and 37 C.F.R. §§ 1.902 *et seq.* of Claims 1-9 of U.S. Patent No. 7,232,656 ("the '656 patent") (Exhibit PAT-A) filed June 30, 2003 and issued June 19, 2007 to Balasubramanian *et al.* The '656 patent was originally examined by Examiner Ethan Whisenant.

Requester informs the Examiner that the '656 patent is involved in litigation in the United States District Court for the District of Delaware, No. 1:09-cv-00706-RK.

In accordance with 37 C.F.R. § 1.915(a) and pursuant to 37 C.F.R. § 1.20(c)(2), the Commissioner is authorized to deduct a fee of $8,800 from VINSON & ELKINS LLP at Deposit Account Number 22-0365/INV850-36024. If additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS LLP at Deposit Account Number 22-0365/INV850-36024.

Date: January 26, 2010

Respectfully submitted,

By: Margaret Sampson

Margaret J. Sampson
USPTO Registration No.: 47,052
Attorney for Requester

CERTIFICATE OF SERVICE

I hereby certify that on January 26, 2010 a true and correct copy of the Request for *Inter Partes* Reexamination of U.S. Patent No. 7,232,656 has been served via First Class Mail upon the following:

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Carolin Spiegel

EXHIBIT 28

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent of:		§	
	John Bridgham, *et al.*	§	Examiner: Unknown
Patent No.:	6,831,994 B2	§	Group Art Unit: Unknown
Issued:	December 14, 2004	§	Appl. No. Unknown
For:	SYSTEM AND APPARATUS FOR SEQUENTIAL PROCESSING OF ANALYTES	§	Atty Docket No.: INV850/36024

MAIL STOP *INTER PARTES* REEXAM
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR INTER PARTES REEXAMINATION

OF U.S. PATENT NO. 6,831,994 B2

Dear Sir:

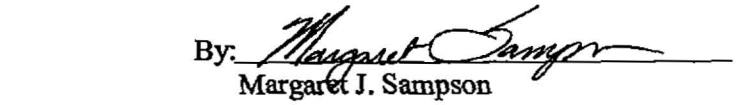
Pursuant to 37 C.F.R. § 1.915(b)(8), the Real Party in Interest, Life Technologies Corporation ("Requester"), hereby respectfully requests reexamination pursuant to 35 U.S.C. §§ 311 *et seq.* and 37 C.F.R. §§ 1.902 *et seq.* of Claims 1-4 of U.S. Patent No. 6,831,994 ("the '994 patent") (Exhibit PAT-A) filed July 17, 2001 and issued December 14, 2004 to Bridgham *et al.* The '994 patent was originally examined by Examiner Jayanti K. Patel.

Requester informs the Examiner that the '994 patent is involved in litigation in the United States District Court for the District of Delaware, No. 1:09-cv-00706-RK.

In accordance with 37 C.F.R. § 1.915(a) and pursuant to 37 C.F.R. § 1.20(c)(2), the Commissioner is authorized to deduct a fee of $8,800 from VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850-36024. If additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850-36024.

Date: January 29, 2010

Respectfully submitted,

By: 

Margaret J. Sampson
USPTO Registration No.: 47,052
Attorney for Requester

CERTIFICATE OF SERVICE

I hereby certify that on January 29, 2010 a true and correct copy of the Request for *Inter Partes* Reexamination of U.S. Patent No. 6,831,994 has been served via First Class Mail upon the following:

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EXHIBIT 29

Vinson&Elkins

Margaret J. Sampson msampson@velaw.com
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CERTIFICATE OF EXPRESS MAILING
NUMBER: EV258031038US
DATE: March 5, 2010
This paper or fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service on the date indicated above and is addressed to: Mail Stop Inter Partes Reexam, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

March 5, 2010

ATTN: CENTRAL REEXAMINATION UNIT (CRU)
MAIL STOP *INTER PARTES* REEXAM
Commissioner for Patents
United States Patent & Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent No. 7,232,656, entitled "Arrayed Biomolecules and Their Use In Sequencing" [Appl. No. 10/610,305]; Control Number: 95/000,528
Our Ref: INV850/36024/4-049REUS

Dear Sirs:

Enclosed please find the following Replacement Request for *Inter Partes* Reexamination of U.S. Patent No. 7,232,656 [Appl. No. 10/610,305]. A return postcard to acknowledge receipt is also included. Please date stamp and mail this postcard.

A fee of $8,800, pursuant to 37 C.F.R. § 1.20(c)(2), was believed paid with the original request filed January 26, 2010; which the Commissioner was authorized to deduct from VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850/36024. If any additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850/36024/4-049REUS.

Very truly yours,

Margaret Sampson

Margaret J. Sampson
Registration No.: 47,052
Attorney for Requester

001864:3058
Enclosures

V&E

cc: Marya Breig, Docket Coordinator, V&E

US 294718v.1

CERTIFICATE OF SERVICE

I hereby certify that on March 5, 2010 a true and correct copy of the Replacement Request for *Inter Partes* Reexamination of U.S. Patent No. 7,232,656 has been served via First Class Mail upon the following:

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US 294798v.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S.	Patent of:	§	
		§	
	Balasubramanian *et al.*	§	Examiner: Unknown
		§	
Patent No.:	7,232,656 B2	§	Group Art Unit: Unknown
		§	
Issued:	June 19, 2007	§	Appl. No. 95/000,528
		§	
For:	ARRAYED BIOMOLECULES AND THEIR USE IN SEQUENCING	§	Atty Docket No.: INV850/4-049REUS
		§	
		§	
		§	

MAIL STOP *INTER PARTES* REEXAM
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLACEMENT REQUEST FOR INTER PARTES REEXAMINATION OF U.S. PATENT NO. 7,232,656 B2

Dear Sir:

Pursuant to 37 C.F.R. § 1.915(b)(8), the Real Party in Interest, Life Technologies Corporation ("Requester"), hereby respectfully requests reexamination pursuant to 35 U.S.C. §§ 311 *et* seq. and 37 C.F.R. §§ 1.902 *et seq.* of Claims 1-9 of U.S. Patent No. 7,232,656 ("the '656 patent") (Exhibit PAT-A) filed June 30, 2003 and issued June 19, 2007 to Balasubramanian *et al.* The '656 patent was originally examined by Examiner Ethan Whisenant.

Requester informs the Examiner that the '656 patent is involved in litigation in the United States District Court for the District of Delaware, No. 1:09-cv-00706-RK.

In accordance with 37 C.F.R. § 1.915(a) and pursuant to 37 C.F.R. § 1.20(c)(2), the Commissioner deducted a fee of $8,800 from VINSON & ELKINS LLP at Deposit Account Number 22-0365/INV850-36024 with submission of the original Request on January 26, 2010. If any additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS LLP at Deposit Account Number 22-0365/INV850-36024.

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e. Bentley, Medical Research Reviews, 20:189-196 (2000) ("Bentley II") Anticipates and Renders Obvious Claims 1 and 2 of the '656 Patent 37

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K. Substantial New Questions of Patentability 20-28: Claims 1-9 of the '656 patent are obvious over Chee I under 35 U.S.C. § 103 214

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Date: March 5, 2010

Respectfully submitted,

By: _____

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EXHIBIT 30

Vinson&Elkins

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February 19, 2010

CENTRAL REEXAMINATION UNIT (CRU)
ATTN: MAIL STOP *INTER PARTES* REEXAM
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent No. 6,831,994, entitled "System and Apparatus for Sequential Processing of Analytes" [Appl. No. 09/908,130]; Control Number: 95/000,529
Our Ref: INV850/36024/4-048REUS

Dear Sirs:

Enclosed please find the following:

- Replacement Request for *Inter Partes* Reexamination of U.S. Patent No. 6,831,994 [Appl. No. 09/908,130]
- Replacement Exhibit PA-SB/08A — USPTO Form SB/08A with references;
- Replacement Exhibits PA-A — PA-P;
- Replacement Exhibits PAT-A — PAT-C;
- Replacement Exhibits CC-A — CC-G-13;
- Replacement Exhibits OTH-A — OTH-L;
- Power of Attorney; and
- A return postcard to acknowledge receipt of these documents. Please date stamp and mail this postcard.

Regarding Replacement Exhibit PA-SB/08A, one of the references listed on Exhibit PA-SB/08A originally filed January 29, 2010, U.S. Patent No. 5,599,668 (Stimpson et al.), has been deleted from Replacement Exhibit PA-SB/08A.

A fee of $8,800, pursuant to 37 C.F.R. § 1.20(c)(2), was believed paid with the original request filed January 29, 2010; which the Commissioner was authorized to deduct from VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850/36024. If any

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additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850/36024/4-048REUS.

Respectfully submitted,

Margaret J. Sampson
Registration No.: 47,052
Attorney for Requester

001864:3058
Enclosures

cc: Marya Breig, Docket Coordinator, V&E

US 276994v.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent of:		§	
	John Bridgham, *et al.*	§	Examiner: Unknown
Patent No.:	6,831,994 B2	§	Group Art Unit: Unknown
Issued:	December 14, 2004	§	Appl. No. 95/000,529
For:	SYSTEM AND APPARATUS FOR SEQUENTIAL PROCESSING OF ANALYTES	§	Atty Docket No.: INV850/36024/ 4-04REUS

MAIL STOP *INTER PARTES* REEXAM
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLACEMENT REQUEST FOR INTER PARTES REEXAMINATION OF U.S. PATENT NO. 6,831,994 B2

Dear Sir:

Pursuant to 37 C.F.R. § 1.915(b)(8), the Real Party in Interest, Life Technologies Corporation ("Requester"), hereby respectfully requests reexamination pursuant to 35 U.S.C. §§ 311 *et seq.* and 37 C.F.R. §§ 1.902 *et seq.* of Claims 1-4 of U.S. Patent No. 6,831,994 ("the '994 patent") (Exhibit PAT-A) filed July 17, 2001 and issued December 14, 2004 to Bridgham *et al.* The '994 patent was originally examined by Examiner Jayanti K. Patel.

Requester informs the Examiner that the '994 patent is involved in litigation in the United States District Court for the District of Delaware, No. 1:09-cv-00706-RK.

In accordance with 37 C.F.R. § 1.915(a) and pursuant to 37 C.F.R. § 1.20(c)(2), the Commissioner deducted a fee of $8,800 from VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850-36024 with submission of the original Request on January 29, 2010. If any additional fees are due or if an overpayment has been made, the Commissioner is authorized to deduct or credit the proper amount to VINSON & ELKINS L.L.P. Deposit Account Number 22-0365/INV850/36024/4-048REUS.

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Date: February 19, 2010

Respectfully submitted,

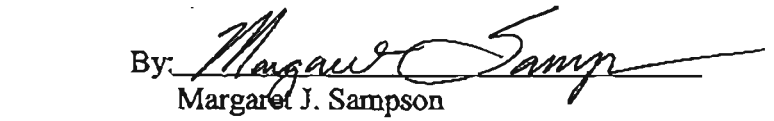
By: 

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EXHIBIT 31

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April 12, 2010

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RE: *Life Technologies Corporation, et al. v. Illumina, Inc. and Solexa, Inc.*, C.A. No. 09-706 (RK) (D. Del., filed Sept. 21, 2009)

Dear Kevin:

Pursuant to the scheduling order in this matter, Plaintiffs identify below the claim terms that they believe should be construed by the Court if the parties cannot reach agreement on their interpretation. Plaintiffs' disclosure of terms to be construed is based upon their current knowledge and understanding. Plaintiffs reserve their right to supplement and/or amend the list of terms to be construed.

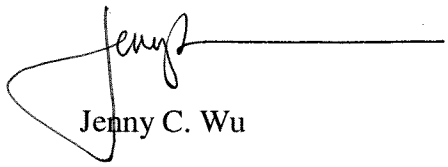
Proposed Terms for Construction from the '478, '698, '568 (Chetverin), '505 and '994 (Bridgham), '656 (Balasubramanian) and '035 (Macevicz) Patents

Term(s)	Appears in
Amplification system/ nucleic acid polymerase enzyme system	U.S. Patent No. 5,616,478, claims 1, 14; U.S. Patent No. 5,958,698, claims 1, 17; U.S. Patent No. 6,001,568, claims 1, 16
Tracking positions of the microparticles	U.S. Patent No. 6,654,505, claim 1
Optical signals generated at the microparticles	U.S. Patent No. 6,654,505, claim 1
Plurality of digital images of the planar array . . . based on optical signals	U.S. Patent No. 6,654,505, claim 1
Processing the plurality of digital images	U.S. Patent No. 6,654,505, claim 1

Term(s)	Appears in
Correlating the optical signals generated at each microparticle with its corresponding image in each of the plurality of digital images	U.S. Patent No. 6,654,505, claim 1
Optical characteristic of said/each microparticle	U.S. Patent No. 6,654,505, claim 2; U.S. Patent No. 6,831,994, claim 1
Optical train effective to	U.S. Patent No. 6,831,994, claim 1
Imaging device onto which said signals are focused	U.S. Patent No. 6,831,994, claim 1
Sequence of digital images of the microparticles	U.S. Patent No. 6,831,994, claim 1
With sufficient resolution for individual microparticles to be distinguished	U.S. Patent No. 6,831,994, claim 1
Signal tracking means effective to correlate the optical signals from each of the microparticles in each of the sequence of digital images with said center of said microparticle	U.S. Patent No. 6,831,994, claim 1
Randomly fragmenting a genome of said individual	U.S. Patent No. 7,232,656, claims 1, 7
Generating sequence reads	U.S. Patent No. 7,232,656, claims 1, 7
Which molecules can be individually resolved by optical microscopy	U.S. Patent No. 7,232,656, claim 3
An array of polynucleotide fragments	U.S. Patent No. 7,232,656, claim 3
Arraying the fragments	U.S. Patent No. 7,232,656, claim 7
Different fragments can be individually resolved by optical microscopy	U.S. Patent No. 7,232,656, claim 7
Population of polynucleotide fragments	U.S. Patent No. 7,598,035, claims 1, 3
Vector	U.S. Patent No. 7,598,035, claims 1, 3, 5
Ligating together the cleaved ends produced by said removing/ ligating the pair of segments together	U.S. Patent No. 7,598,035, claims 1, 5
Said vector comprises two type IIs restriction endonuclease recognition sites/a vector having two type IIs restriction endonuclease sites	U.S. Patent No. 7,598,035, claims 1, 3

Please feel free to contact me if you have any questions.

Sincerely,



Jenny C. Wu

cc: Steven Balick, Esq.
Jack Blumenfeld, Esq.