Pfenex Inc. Form SC 13G/A July 10, 2017

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13G

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 3)*

PFENEX INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share (Title of Class of Securities)

717071104

(CUSIP Number)

June 30, 2017

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is

filed:

- [X] Rule 13d 1(b)
- [] Rule 13d 1(c)
- [] Rule 13d 1(d)

*The remainder of this cover page shall be filled out for a reporting person's

initial filing on this form with respect to the subject class of securities, and

for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to

be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934

("Act") or otherwise subject to the liabilities of that section of the $\mbox{\mbox{\sc Act}}$ but

shall be subject to all other provisions of the $\mbox{\it Act}$ (however, see the $\mbox{\it Notes}$).

Page	CUSIP 2 of		717071104			1	3G		
	1.	NAME	S OF REPOI	RTING PERSO	ONS.				
		Fran	klin Resou	irces, Inc.					
	2.	CHEC	K THE APPI	ROPRIATE BO	OX IF A	MEMBER	OF A GROUI	2	
		(a)	X						
	3.	SEC	USE ONLY						
	4.	CITI	ZENSHIP O	R PLACE OF	ORGANI	ZATION			
		Dela	ware						
	NUMBE	R OF	SHARES BEI	NEFICIALLY	OWNED	BY EACH	REPORTING	PERSON	WITH:

5.

SOLE VOTING POWER

		(See Item 4)
	6.	SHARED VOTING POWER
		(See Item 4)
	7.	SOLE DISPOSITIVE POWER
		(See Item 4)
	8.	SHARED DISPOSITIVE POWER
		(See Item 4)
9.	AGGREG	GATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	2,673,	691
10.	CHECK	IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
	CERTAI	N SHARES []
11.	PERCEN	IT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	11.4%	

12. TYPE OF REPORTING PERSON

HC, CO (See Item 4)

Page	CUSIP 3 of		717071104		13G		
	1.	NAME	S OF REPORTING PERSO	NS.			
		Char	Les B. Johnson				
	2.	CHEC	K THE APPROPRIATE BO	X IF A MEME	BER OF A GROUE)	
		(a)	ζ				
	3.	SEC	USE ONLY				
	4.	CITI	ZENSHIP OR PLACE OF	ORGANIZATIC	DN		
		USA					
	NUMBE	R OF	SHARES BENEFICIALLY	OWNED BY EA	ACH REPORTING	PERSON	WITH:

5. SOLE VOTING POWER

		(See Item 4)
	6.	SHARED VOTING POWER
		(See Item 4)
	7.	SOLE DISPOSITIVE POWER
		(See Item 4)
	8.	SHARED DISPOSITIVE POWER
		(See Item 4)
9.	AGGR	EGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	2 , 673	3,691
10.	CHEC	K IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
	CERTA	IN SHARES []
11.	PERC	ENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	11.4%	

12. TYPE OF REPORTING PERSON

HC, IN (See Item 4)

CUSIP 4 of		13G
1.	NAMES OF REPORTING PERSONS.	
	Rupert H. Johnson, Jr.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBE	R OF A GROUP
	(a) (b) X	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	ī
	USA	
NUMBE:	R OF SHARES BENEFICIALLY OWNED BY EAC	H REPORTING PERSON WITH:

5. SOLE VOTING POWER

		(See Item 4)
	6.	SHARED VOTING POWER
		(See Item 4)
	7.	SOLE DISPOSITIVE POWER
		(See Item 4)
	8.	SHARED DISPOSITIVE POWER
		(See Item 4)
9.	AGGRE	GATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	2,673	,691
10.	CHECK	I IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
	CERTA	IN SHARES []
11.	PERCE	NT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	11.4%	

12. TYPE OF REPORTING PERSON

HC, IN (See Item 4)

Page	CUSIP 5 of	NO. 717071104 14	13G
	1.	NAMES OF REPORTING PERSONS.	
		Franklin Advisers, Inc.	
	2.	CHECK THE APPROPRIATE BOX IF A MEMBE	ER OF A GROUP
		(a) (b) X	
	3.	SEC USE ONLY	
	4.	CITIZENSHIP OR PLACE OF ORGANIZATION	N
		California	
	NUMBE:	R OF SHARES BENEFICIALLY OWNED BY EAC	CH REPORTING PERSON WITH:

5. SOLE VOTING POWER

		2,650,391
	6.	SHARED VOTING POWER
		0
	7.	SOLE DISPOSITIVE POWER
		2,650,391
	8.	SHARED DISPOSITIVE POWER
		0
9.	AGGRE	GATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	2 , 650	0,391
10.		(IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES IN SHARES []
11.	PERCE	INT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	11.3%	

12. TYPE OF REPORTING PERSON

IA, CO (See Item 4)

Page	CUSIP 6 of	NO. 717071104 14	13G
	Item	1.	
	(a)	Name of Issuer	
		PFENEX INC.	
	(b)	Address of Issuer's Principal Execut	cive Offices
		10790 Roselle Street San Diego, CA 92121	
	Item	2.	
	(a)	Name of Person Filing	
		(i): Franklin Resources, Inc.	

(ii): Charles B. Johnson

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(iii): Rupert H. Johnson, Jr.
     (iv): Franklin Advisers, Inc.
   Address of Principal Business Office or, if none, Residence
(b)
     (i), (ii), and (iii):
     One Franklin Parkway
     San Mateo, CA 94403 1906
     (iv): One Franklin Parkway
           San Mateo, CA 94403 1906
(c) Citizenship
     (i): Delaware
     (ii) and (iii): USA
     (iv): California
(d) Title of Class of Securities
     Common Stock, par value $0.001 per share
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(e) CUSIP Number

717071104

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	em 3. If this statement is filed purs d 2(b) or (c),	suant to §§240.13d 1(b) or
	check whether the person filing	is a:
U.S.C. 7		red under section 15 of the Act (15
78c).	(b) [] Bank as defined in secti	on 3(a)(6) of the Act (15 U.S.C.
(15 U.S.		ined in section 3(a)(19) of the Act
	78c).	
	(d) [] Investment company regis	tered under section 8 of the
Investme	ment Company	
	Act of 1940 (15 U.S.C 80a	a 8).
\$240.13d	(e) [X] An investment adviser in 3d 1(b)(1)(ii)(E);	accordance with
with	(f) [] An employee benefit plan	or endowment fund in accordance

\$240.13d 1(b)(1)(ii)(F);

(g) [X] A parent holding company or control person in accordance with

\$240.13d 1(b)(1)(ii)(G);

(h) [] A savings associations as defined in Section 3(b) of the Federal Deposit $\,$

Insurance Act (12 U.S.C. 1813);

- (i) [] A church plan that is excluded from the definition of an investment $\$
- company under section 3(c) (14) of the Investment Company Act of 1940 (15

U.S.C. 80a 3);

- (j) [] A non U.S. institution in accordance with $\$240.13d\ 1(b)\ (ii)\ (J);$
 - (k) [] Group, in accordance with \$240.13d 1(b)(1)(ii)(K).

If filing as a non U.S. institution in accordance with $\$240.13d\ 1(b)(1)(ii)$ (J).

please specify the type of institution:

Item 4. Ownership

The securities reported herein are beneficially owned by one or more open or closed end

investment companies or other managed accounts that are investment management clients of

investment managers that are direct and indirect subsidiaries (each, an "Investment"

Management Subsidiary" and, collectively, the "Investment Management Subsidiaries") of

Franklin Resources Inc. ("FRI"), including the Investment Management Subsidiaries listed

in this Item 4. When an investment management contract (including a sub advisory

agreement) delegates to an Investment Management Subsidiary investment discretion or

voting power over the securities held in the investment advisory accounts that are

subject to that agreement, FRI treats the Investment Management Subsidiary as having sole

investment discretion or voting authority, as the case may be, unless the agreement

specifies otherwise. Accordingly, each Investment Management Subsidiary reports on

Schedule 13G that it has sole investment discretion and voting authority over the $\ensuremath{\mathsf{S}}$

securities covered by any such investment management agreement, unless otherwise noted in

this Item 4. As a result, for purposes of Rule $13d\ 3$ under the Act, the Investment

Management Subsidiaries listed in this Item $4\,\mathrm{may}$ be deemed to be the beneficial owners

of the securities reported in this Schedule 13G.

Beneficial ownership by Investment Management Subsidiaries and other FRI affiliates is

being reported in conformity with the guidelines articulated by the SEC staff in Release

No. $34\ 39538$ (January 12, 1998) relating to organizations, such as FRI, where related

entities exercise voting and investment powers over the securities being reported

independently from each other. The voting and investment powers held by Franklin Mutual

Advisers, LLC ("FMA"), an indirect wholly owned Investment Management Subsidiary, are

exercised independently from FRI and from all other Investment Management Subsidiaries

(FRI, its affiliates and the Investment Management Subsidiaries other than ${\sf FMA}$ are

collectively, "FRI affiliates"). Furthermore, internal policies and procedures of FMA and

 ${\tt FRI}$ establish informational barriers that prevent the flow between FMA and the ${\tt FRI}$

affiliates of information that relates to the voting and investment powers over the $\ensuremath{\mathsf{E}}$

securities owned by their respective management clients. Consequently, FMA and FRI

affiliates report the securities over which they hold investment and voting power

separately from each other for purposes of Section 13 of the Act.

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Charles B. Johnson and Rupert H. Johnson, Jr. (the "Principal Shareholders") each own in

excess of 10% of the outstanding common stock of FRI and are the principal stockholders

of FRI. FRI and the Principal Shareholders may be deemed to be, for purposes of Rule

13d 3 under the Act, the beneficial owners of securities held by persons and entities for

whom or for which FRI subsidiaries provide investment management services. The number of

shares that may be deemed to be beneficially owned and the percentage of the class of

which such shares are a part are reported in Items 9 and 11 of the cover pages for FRI

and each of the Principal Shareholders. FRI, the Principal Shareholders and each of the

Investment Management Subsidiaries disclaim any pecuniary interest in any of the such

securities. In addition, the filing of this Schedule 13G on behalf of the Principal

Shareholders, FRI and the FRI affiliates, as applicable, should not be construed as an

admission that any of them is, and each of them disclaims that it is, the beneficial

owner, as defined in Rule 13d 3, of any of the securities reported in this Schedule 13G.

FRI, the Principal Shareholders, and each of the Investment Management Subsidiaries
believe that they are not a "group" within the meaning of Rule 13d 5 under the Act and
that they are not otherwise required to attribute to each other the beneficial ownership
of the securities held by any of them or by any persons or entities for whom or for which
the Investment Management Subsidiaries provide investment management services.
(a) Amount beneficially owned:
2,673,691
(b) Percent of class:
11.4%
(c) Number of shares as to which the person has:
(i) Sole power to vote or to direct the vote
Franklin Resources, Inc.: 0
Charles B. Johnson:

Jr.:	Rupert H. Johnson,	
Inc.:	Franklin Advisers, 2,650,391	
International:	Fiduciary Trust Company 23,300	
(ii)	Shared power to vote or to direct the	vote
	0	
(iii)	Sole power to dispose or to direct the	e disposition of
Inc.:	Franklin Resources, 0	
Johnson:	Charles B.	0
Jr.:	Rupert H. Johnson,	
Inc.:	Franklin Advisers, 2,650,391	

Fiduciary Trust Company International: 23,300

(iv) Shared power to dispose or to direct the disposition of

0

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Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof

 $$\operatorname{the}$ reporting person has ceased to be the beneficial owner of more than five

percent of the class of securities,

check the following []. Not Applicable

Item 6. Ownership of More than Five Percent on Behalf of Another Person

The clients of the Investment Management Subsidiaries, including investment

companies registered under the Investment Company Act of 1940 and other managed

accounts, have the right to receive or power to direct the receipt of dividends

from, and the proceeds from the sale of, the securities reported herein.

Franklin Small Cap Growth Fund, a series of Franklin Strategic Series, an

investment company registered under the Investment Company Act of 1940, has an

interest in 1,175,631 shares, or 5.0%, of the class of securities reported herein.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security

Being Reported on By the Parent Holding Company

See Attached Exhibit C

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of Group

Not Applicable

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Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities

referred to above were acquired and are held in the ordinary course of business and were

not acquired and are not held for the purpose of or with the effect of changing or

influencing the control of the issuer of the securities and were not acquired and are not

held in connection with or as a participant in any transaction having that purpose or

effect.

This report shall not be construed as an admission by the persons filing the report that $\ensuremath{\mathcal{C}}$

they are the beneficial owner of any securities covered by this report.

Exhibits.

Exhibit A Joint Filing Agreement

Exhibit B Limited Powers of Attorney for Section 13 Reporting Obligations

Exhibit C Item 7 Identification and Classification of Subsidiaries

SIGNATURE

After reasonable inquiry and to the best of $my\ knowledge$ and belief, I certify that the

information set forth in this statement is true, complete and correct.

Dated: July 10, 2017

Franklin Resources, Inc.

Charles B. Johnson

Rupert H. Johnson, Jr.

Franklin Strategic Series on behalf of

Franklin Small Cap Growth Fund

By: /s/LORI ANN WEBER

Lori Ann Weber

Assistant Secretary of Franklin Resources, Inc.

 $\hbox{Attorney in Fact for Charles B. Johnson pursuant to Power of Attorney} \\$ attached to

this Schedule 13G

Attorney in Fact for Rupert H. Johnson, Jr. pursuant to Power of Attorney

attached to this Schedule 13G

Vice President and Assistant Secretary of Franklin Strategic Series

Franklin Advisers, Inc.

By: /s/BREDA M. BECKERLE

Breda M. Beckerle

Chief Compliance Officer of Franklin Advisers, Inc.

CUSIP NO. 717071104 13G Page 11 of 14 EXHIBIT A JOINT FILING AGREEMENT In accordance with Rule 13d 1(k) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing with each other of the attached statement on Schedule 13G and to all amendments to such statement and that such statement and all amendments to such statement are made on behalf of each of them. IN WITNESS WHEREOF, the undersigned have executed this agreement on July 10, 2017. Franklin Resources, Inc. Charles B. Johnson

Rupert H. Johnson, Jr.

Franklin Strategic Series on behalf of

Franklin Small Cap Growth Fund

By: /s/LORI ANN WEBER

Lori Ann Weber

Assistant Secretary of Franklin Resources, Inc.

 $\hbox{Attorney in Fact for Charles B. Johnson pursuant to Power of Attorney} \\$ attached to

this Schedule 13G

 $\hbox{Attorney in Fact for Rupert H. Johnson, Jr. pursuant to Power of } \\$ $\hbox{Attorney}$

attached to this Schedule 13G

Vice President and Assistant Secretary of Franklin Strategic Series

Franklin Advisers, Inc.

By: /s/BREDA M. BECKERLE

Breda M. Beckerle

Chief Compliance Officer of Franklin Advisers, Inc.

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EXHIBIT B

LIMITED POWER OF ATTORNEY

FOR

SECTION 13 AND 16 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and appoints $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

each of Alison E. Baur, Maria Gray, Steven J. Gray, Kimberly H. Novotny, Karen L. Skidmore,

Navid J. Tofigh and Lori A. Weber each acting individually, as the undersigned's true and

lawful attorney in fact, with full power and authority as hereinafter described on behalf

of and in the name, place and stead of the undersigned to:

- (1) prepare, execute, acknowledge, deliver and file Forms ID, Schedules 13D and 13G, and
- Forms 3, 4 and 5 (including any amendments thereto and any related documentation) with the

United States Securities and Exchange Commission and any national securities exchanges

relating to Franklin Resources, Inc. ("FRI") and/or any registered closed end company to

which an affiliate of FRI is an investment adviser (each, a "Reporting Entity"), as

considered necessary or advisable under Regulation S T and Sections 13(d) and 16(a) of the

Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder, as

amended from time to time (the "Exchange Act"); and

(2) seek or obtain, as the undersigned's representative and on the undersigned's behalf,

information on transactions in the securities of any Reporting Entity from any person,

including brokers, employee benefit plan administrators and trustees, and the undersigned

hereby authorizes any such person to release any such information to the undersigned and

approves and ratifies any such release of information; and

(3) perform any and all other acts which in the discretion of such attorney in fact are

necessary or desirable for and on behalf of the undersigned in connection with the $\ensuremath{\mathsf{N}}$

foregoing.

The undersigned acknowledges that:

(1) this Limited Power of Attorney authorizes, but does not require, each such

attorney in fact to act in their discretion on information provided to such attorney in fact without independent verification of such information;

(2) any documents prepared and/or executed by any such attorney in fact on behalf of the

undersigned pursuant to this Limited Power of Attorney will be in such form and will

contain such information and disclosure as such attorney in fact, in his or her discretion,

deems necessary or desirable;

(3) none of FRI, any Reporting Entity nor any of such attorneys in fact assumes (i) any

liability for the undersigned's responsibility to comply with the requirements of the

Exchange Act, (ii) any liability of the undersigned for any failure to comply with such

requirements, or (iii) any obligation or liability of the undersigned for profit

disgorgement under Section 16(b) of the Exchange Act; and

(4) this Limited Power of Attorney does not relieve the undersigned from responsibility

for compliance with the undersigned's obligations under the Exchange Act, including without

limitation, the reporting requirements under Section 16 of the Exchange $\mbox{\mbox{Act.}}$

The undersigned hereby gives and grants each of the foregoing attorneys in fact full $\ensuremath{\mathsf{I}}$

power and authority to do and perform all and every act and thing whatsoever requisite,

necessary or appropriate to be done in and about the foregoing matters as fully to all

intents and purposes as the undersigned might or could do if present, hereby ratifying all

that each such attorney in fact of, for and on behalf of the undersigned, shall lawfully do

or cause to be done by virtue of this Limited Power of Attorney.

This Limited Power of Attorney shall remain in full force and effect until revoked by the

	under	rsigned	dinas	signed	writing	delive	red to	each s	such a	attorne	y in	fact.	
Att		WITNE to be		EOF, th	ne under	signed	has ca	nused t	his L	imited	Power	of	
	execu	ited as	s of thi	is	27th		_day c)f	Febr	uary		2017	•
									<u>/s</u>	/Charl	es B.	Johns	<u>on</u>
									Si	gnatur	е		
									<u>Ch</u>	arles	B. Joh	nson	
									Pr	int Na	me		

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LIMITED POWER OF ATTORNEY

FOR

SECTION 13 AND 16 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and appoints

each of Alison E. Baur, Maria Gray, Steven J. Gray, Kimberly H. Novotny, Karen L. Skidmore,

Navid J. Tofigh and Lori A. Weber each acting individually, as the undersigned's true and

lawful attorney in fact, with full power and authority as hereinafter described on behalf

of and in the name, place and stead of the undersigned to:

- (1) prepare, execute, acknowledge, deliver and file Forms ID, Schedules 13D and 13G, and
- Forms 3, 4 and 5 (including any amendments thereto and any related documentation) with the $\frac{1}{2}$

United States Securities and Exchange Commission and any national securities exchanges

relating to Franklin Resources, Inc. ("FRI") and/or any registered closed end company to

which an affiliate of FRI is an investment adviser (each, a "Reporting Entity"), as

considered necessary or advisable under Regulation S T and Sections 13(d) and 16(a) of the

Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder, as

amended from time to time (the "Exchange Act"); and

(2) seek or obtain, as the undersigned's representative and on the undersigned's behalf,

information on transactions in the securities of any Reporting Entity from any person,

including brokers, employee benefit plan administrators and trustees, and the undersigned

hereby authorizes any such person to release any such information to the undersigned and

approves and ratifies any such release of information; and

(3) perform any and all other acts which in the discretion of such attorney in fact are

necessary or desirable for and on behalf of the undersigned in connection with the

foregoing.

The undersigned acknowledges that:

(1) this Limited Power of Attorney authorizes, but does not require, each such

attorney in fact to act in their discretion on information provided to such attorney in fact without independent verification of such information;

(2) any documents prepared and/or executed by any such attorney in fact on behalf of the

undersigned pursuant to this Limited Power of Attorney will be in such form and will

contain such information and disclosure as such attorney in fact, in his or her discretion,

deems necessary or desirable;

(3) none of FRI, any Reporting Entity nor any of such attorneys in fact assumes (i) any

liability for the undersigned's responsibility to comply with the requirements of the

Exchange Act, (ii) any liability of the undersigned for any failure to comply with such

requirements, or (iii) any obligation or liability of the undersigned for profit

disgorgement under Section 16(b) of the Exchange Act; and

(4) this Limited Power of Attorney does not relieve the undersigned from responsibility

for compliance with the undersigned's obligations under the Exchange Act, including without

limitation, the reporting requirements under Section 16 of the Exchange $\mbox{\sc Act.}$

The undersigned hereby gives and grants each of the foregoing attorneys in fact full $% \left(1\right) =\left(1\right) +\left(1\right$

power and authority to do and perform all and every act and thing whatsoever requisite,

necessary or appropriate to be done in and about the foregoing matters as fully to all

intents and purposes as the undersigned might or could do if present, hereby ratifying all

that each such attorney in fact of, for and on behalf of the undersigned, shall lawfully do

or cause to be done by virtue of this Limited Power of Attorney.

This Limited Power of Attorney shall remain in full force and effect until revoked by the

undersigned in a signed writing delivered to each such attorney in fact.

IN WITNESS WHEREOF, the undersigned has caused this Limited Power of Attorney to be

executed as of this 27th day of February , 2017.

<u>Jr.</u>	/s/Rupert H. Johnson,
	Signature
	Rupert H. Johnson, Jr.
	Print Name

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Item 3

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EXHIBIT C

Franklin Advisers, Inc. Item 3
Classification: 3(e)

Fiduciary Trust Company International

CUSIP NO. 717071104

Classification: 3(b)