CA, INC. Form SC 13G/A September 10, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.2)*

NAME OF ISSUER: CA, Inc.

TITLE OF CLASS OF SECURITIES: Common Stock

CUSIP NUMBER: 12673P105

DATE OF EVENT WHICH REQUIRES FILING OF THIS STATEMENT: August 31, 2018

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 Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP NUMBER: 12673P105

- (1) Names of Reporting Persons The Bank of New York Mellon Corporation IRS Identification Nos. of Above Persons IRS No.13-2614959
- (2) Check the Appropriate Box if a Member of a Group (See Instructions)
 (a) () (b) ()
- (3) SEC use only
- (4) Citizenship or Place of Organization New York

Number of Shares (5) Sole Voting Power 14,147,067
Beneficially
Owned by Each (6) Shared Voting Power 448
Reporting Person
With (7) Sole Dispositive Power 16,316,968

- (8) Shared Dispositive Power 604,388
- (9) Aggregate Amount Beneficially Owned by Each Reporting Person 16,921,356
- (10) Check if the Aggregated Amount in Row (9) Excludes Certain

Shares (see Instructions) (11) Percent of Class Represented by Amount in Row (9) (12) Type of Reporting Person (See Instructions) (12) Type of Reporting Person (See Instructions) (13) Names of Reporting Persons IRS Identification Nos. of Above Persons IRS No.82-212198 (2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) () (3) SEC use only (4) Citizenship or Place of Organization New York	
(12) Type of Reporting Person (See Instructions) CUSIP NUMBER: 12673P105 (1) Names of Reporting Persons BNY Mellon IHC, LI IRS Identification Nos. of Above Persons IRS No.82-212198 (2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) () (3) SEC use only	,
CUSIP NUMBER: 12673P105 (1) Names of Reporting Persons BNY Mellon IHC, LI IRS Identification Nos. of Above Persons IRS No.82-212198 (2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) () (3) SEC use only	70
(1) Names of Reporting Persons IRS Identification Nos. of Above Persons IRS No.82-212198 (2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) () (3) SEC use only	7
IRS Identification Nos. of Above Persons IRS No.82-212198 (2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) () (3) SEC use only	
(a) () (b) () (3) SEC use only	
	⋾)
(4) Citizenship or Place of Organization New York	
- Programme and the second of	ζ
Number of Shares (5) Sole Voting Power 12,980,211	1
Beneficially Owned by Each (6) Shared Voting Power ()
Reporting Person With (7) Sole Dispositive Power 15,192,855	5
(8) Shared Dispositive Power 461,895	5
(9) Aggregate Amount Beneficially Owned by Each Reporting Person 15,654,750)
(10) Check if the Aggregated Amount in Row (9) Excludes Certain Shares (see Instructions) ())
(11) Percent of Class Represented by Amount in Row (9) 3.74%	90
(12) Type of Reporting Person (See Instructions)	2
CUSIP NUMBER: 12673P105	
(1) Names of Reporting Persons MBC Investments Corporation IRS Identification Nos. of Above Persons IRS No.51-030113	
(2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) ()	3)
(3) SEC use only	
(4) Citizenship or Place of Organization Delaware	€
Number of Shares (5) Sole Voting Power 12,980,211	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	О
Reporting Person With (7) Sole Dispositive Power 15,192,855	ō
(8) Shared Dispositive Power 461,895	ō
(9) Aggregate Amount Beneficially Owned by Each Reporting Person 15,654,750)
(10) Check if the Aggregated Amount in Row (9) Excludes Certain	

Shares (see Instructions)		()
(11) Percent of Class Represe	nted by	y Amount in Row (9)	3.74%
(12) Type of Reporting Person	(See	Instructions)	НС
CUSIP NUMBER: 12673P105			
(1) Names of Reporting Pe	rsons I	BNY Mellon Investment N	-
IRS Identification No	s. of A	(Jersey) l Above Persons	IRS No.
(2) Check the Appropriate (a) () (b) ()	Box it	f a Member of a Group	(See Instructions)
(3) SEC use only			
(4) Citizenship or Place	of Orga	anization	Jersey
Number of Shares	(5)	Sole Voting Power	11,164,197
Beneficially Owned by Each	(6)	Shared Voting Power	0
Reporting Person With	(7)	Sole Dispositive Powe	er 13,448,430
	(8)	Shared Dispositive Po	ower 0
(9) Aggregate Amount Benefic by Each Reporting Person	_	Dwned	13,448,430
(10) Check if the Aggregated Shares (see Instructions		in Row (9) Excludes Co	ertain ()
(11) Percent of Class Represe	nted by	y Amount in Row (9)	3.22%
(12) Type of Reporting Person	(See	Instructions)	НС
CUSIP NUMBER: 12673P105			
(1) Names of Reporting Pe	rsons I	BNY Mellon Investment N	-
IRS Identification No	s. of A	(Europe) l Above Persons	IRS No.
(2) Check the Appropriate (a) () (b) ()	Box it	f a Member of a Group	(See Instructions)
(3) SEC use only			
(4) Citizenship or Place	of Orga	anization	London
Number of Shares	(5)	Sole Voting Power	11,164,197
Beneficially Owned by Each	(6)	Shared Voting Power	0
Reporting Person With	(7)	Sole Dispositive Powe	er 13,448,430
	(8)	Shared Dispositive Po	ower 0
(9) Aggregate Amount Benefic by Each Reporting Person	_	Dwned	13,448,430

	neck if the Aggregated Am nares (see Instructions)	ount	in Row (9) Excludes Certain	n ()
(11) Pe	ercent of Class Represent	ed by	Amount in Row (9)	3.22%
(12) Ty	/pe of Reporting Person (See I	nstructions)	HC
CUSIP N	NUMBER: 12673P105			
(1) Names of Reporting Persons BNY Mellon Investment Management Europe Holdings limited				
	IRS Identification Nos.	of A		-
(2)	Check the Appropriate E (a) () (b) ()	ox if	a Member of a Group (See	Instructions)
(3)	SEC use only			
(4)	Citizenship or Place of	Orga	nization	London
Number Benefic	of Shares	(5)	Sole Voting Power	11,164,197
Owned b	oy Each ing Person	(6)	Shared Voting Power	0
With	ing reison	(7)	Sole Dispositive Power	13,448,430
		(8)	Shared Dispositive Power	0
-	ggregate Amount Beneficia 7 Each Reporting Person	lly C)wned	13,448,430
(10) Check if the Aggregated Amount in Row (9) Excludes Certain Shares (see Instructions) ()				
(11) Percent of Class Represented by Amount in Row (9) 3.22%				
(12) Type of Reporting Person (See Instructions) HC				
CUSIP NUMBER: 12673P105				
(1)	Names of Reporting Pers	ons E	NY Mellon International As Management Group Limite	
	IRS Identification Nos. of Above Persons IRS No.98-0464992			
(2)	(2) Check the Appropriate Box if a Member of a Group (See Instructions) (a) () (b) ()			
(3)	SEC use only			
(4)	Citizenship or Place of	Orga	nization	London
	of Shares	(5)	Sole Voting Power	11,164,197
	by Each	(6)	Shared Voting Power	0
With	ing Person	(7)	Sole Dispositive Power	13,448,430
		(8)	Shared Dispositive Power	0

(9) Aggregate Amount Beneficial by Each Reporting Person	lly Owned	13,448,430		
(10) Check if the Aggregated Amo Shares (see Instructions)	ount in Row (9) Excludes Certa	in ()		
(11) Percent of Class Represented by Amount in Row (9) 3.22%				
(12) Type of Reporting Person (S	(12) Type of Reporting Person (See Instructions)			
CUSIP NUMBER: 12673P105				
(1) Names of Reporting Perso		gement Limited No.98-0196145		
(2) Check the Appropriate Bo				
(3) SEC use only				
(4) Citizenship or Place of	Organization	London		
Number of Shares	(5) Sole Voting Power	11,164,197		
Beneficially Owned by Each	(6) Shared Voting Power	0		
Reporting Person With	(7) Sole Dispositive Power	13,448,430		
	(8) Shared Dispositive Power	0		
(9) Aggregate Amount Beneficially Owned by Each Reporting Person 13,448,430				
(10) Check if the Aggregated Amount in Row (9) Excludes Certain Shares (see Instructions) ()				
(11) Percent of Class Represented by Amount in Row (9) 3.22%				
(12) Type of Reporting Person (See Instructions) HC				
CUSIP NUMBER: 12673P105				
(1) Names of Reporting Persons Newton Investment Management Limited IRS Identification Nos. of Above Persons IRS No.98-0196228				
(2) Check the Appropriate Box if a Member of a Group (See Instructions (a) () (b) ()				
(3) SEC use only				
(4) Citizenship or Place of	Organization	London		
Number of Shares	(5) Sole Voting Power	10,608,704		
Beneficially Owned by Each	(6) Shared Voting Power	0		
Reporting Person With	(7) Sole Dispositive Power	12,892,937		
	(8) Shared Dispositive Power	0		

				0 0	,	
(9)	22 2			t Beneficially C ng Person	wned	12,892,937
(10)			_	gregated Amount tructions)	in Row (9) Excludes Certain	()
(11)	Percent	tof	Clas	s Represented by	Amount in Row (9)	3.08%
(12)	Type o	f Rep	orti	ng Person (See I	nstructions)	IA
				SCHE	DULE 13G	
Item	1(a)	Nam	e of	Issuer:	CA, Inc.	
Item	1(b)	Add	ress	of Issuer's Pri	ncipal Executive Office:	
				New Y	Madison Avenue, 22nd Floor Mork, New York 10022 Ed States	
Item	2(a)	Nam	e of	Person Filing:	The Bank of New York Mell and any other reporting p identified on the second cover page(s) and Exhibit	erson(s) part of the
Item	2 (b)	Ad	dres		Rusiness Office, or if None, 2/O The Bank of New York Mel 240 Greenwich Street New York, New York 10286 (for all reporting perso	lon Corporation
Item	2(c)	Ci	tize	nship:	See cover page and Exhibit	I
Item 2(d) Title of Class of Securities: Common Stock						
CUSIP Number 12673P105						
<pre>Item 3 See Item 12 of cover page(s) ("Type of Reporting</pre>						
Symbol Category						
		BD	=		er registered under Section Lange Act of 1934	15 of the
		BK	=	Bank as defined Exchange Act of	l in Section 3(a)(6) of the 1934	Securities
		IV	=	-	eany registered under Section eany Act of 1940	n 8 of the
		IA	=		sor registered under Sections	n 203 of the
		EP	=	to the provision Security Act of	t Plan, Pension Fund which ons of the Employee Retireme 1974 or Endowment Fund; se - d(1)(b)(1)(ii)(F)	nt Income
		НС	=	Parent Holding	Company, in accordance with	Section

240.13-d(1)(b)(1)(ii)(G)

The amount beneficially owned includes, where appropriate, securities not outstanding which are subject to options, warrants, rights or conversion privileges that are exercisable within 60 days. The securities reported herein as beneficially owned may exclude securities of the issuer with respect to which voting and/or dispositive power is exercised by subsidiaries of The Bank of New York Mellon Corporation, or departments or units thereof, independently from the exercise of those powers over the securities reported herein. See SEC Release No. 34-39538 (January 12, 1998). The filing of this Schedule 13G shall not be construed as an admission that The Bank of New York Mellon Corporation, or its direct or indirect subsidiaries, including The Bank of New York Mellon and BNY Mellon, National Association, are for the purposes of Section 13(d) or 13(g) of the Act, the beneficial owners of any securities covered by this Schedule 13G.

The following information applies if checked: () The Bank of New York Mellon and/or () The Bank of New York Mellon Trust Company, National Association is/are the trustee of the issuer's employee benefit plan (the Plan), which is subject to ERISA. The securities reported include all shares held of record by such reporting person(s) as trustee of the Plan which have not been allocated to the individual accounts of employee participants in the Plan. The reporting person, however, disclaims beneficial ownership of all shares that have been allocated to the individual accounts of employee participants in the Plan for which directions have been received and followed.

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 the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following (X)

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

All of the securities are beneficially owned by The Bank of New York Mellon Corporation and its direct or indirect subsidiaries in their various fiduciary capacities. As a result, another entity in every instance is entitled to dividends or proceeds of sale. The number of individual accounts holding an interest of 5% or more is ()

- Item 7 Identification and Classification of the Subsidiary Which Acquired
 the Security Being Reported by the Parent Holding Company:
 See Exhibit I.
- Item 8 Identification and Classification of Members of the Group: N/A
- Item 9 Notice of Dissolution of Group: N/A

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 and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

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. This filing is signed by The Bank of New York Mellon Corporation on behalf of all reporting entities pursuant to Rule 13d-1(k)(1) promulgated under the Securities and Exchange Act of 1934, as amended.

Date: September 10, 2018

THE BANK OF NEW YORK MELLON CORPORATION

By: /s/ IVAN R. ARIAS
----Ivan R. Arias
Attorney-In-Fact

EXHIBIT I

The shares reported on the attached Schedule 13G are beneficially owned by the following direct or indirect subsidiaries of The Bank of New York Mellon Corporation, as marked (X):

- (A) The Item 3 classification of each of the subsidiaries listed below is "Item 3(b) Bank as defined in Section 3(a)(6) of the Act" (15 U.S.C. 78c) or "Item 3(j)A non-U.S. institution in accordance with Rule 240.13d-1 (b)(1)(ii)(J)"
 - (X) The Bank of New York Mellon (parent holding company of Mellon Overseas Investment Corporation; BNY International Financing Corporation; The Bank of New York Mellon SA/NV)
 - () The Bank of New York Mellon Trust Company, National Association
 - (X) BNY Mellon, National Association
 - (X) BNY Mellon Trust of Delaware
 - (X) The Bank of New York Mellon SA/NV (parent holding company of BNY Mellon Service Kapitalanlage-Gesellschaft mbH)
- (B) The Item 3 classification of each of the subsidiaries listed below is "Item 3(e) An investment adviser in accordance with Section 240.13d-1 (b)(1)(ii)(E)" or "Item 3(j) A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J)"
 - () ARX Investimentos Ltda (parent holding company of BNY Mellon Alocacao de Patrimonia Ltda.)
 - () BNY Mellon Alocacao de Patrimonia Ltda
 - () BNY Mellon Servicos Financeiros Distribuidora de Titulos e Valores Mobiliarios S.A.(parent holding company of BNY Mellon Administracao de Ativos Ltda.)
 - () BNY Mellon Administracao de Ativos Ltda.
 - (X) The Dreyfus Corporation (parent holding company of MBSC Securities Corporation)
 - () Insight Investment Management (Global) Limited
 - () Insight North America LLC
 - (X) Lockwood Advisors, Inc.
 - (X) BNY Mellon Asset Management North America Corporation
 - (X) Newton Investment Management (North America) Limited
 - (X) Newton Investment Management Limited
 - () Walter Scott & Partners Limited
 - () BNY Mellon Wealth Management, Advisory Services, Inc.
 - () BNY Mellon Trust Company(Cayman) Limited
 - () BNY Mellon Investment Management Cayman Limited
 - () Insight Investment International Limited
 - () BNY Mellon Asset Management Japan Limited

- (C) The Item 3 classification of each of the subsidiaries listed below is "Item 3(a) Broker or dealer registered under Section 15 of the Act" (15 U.S.C. 78c) or "Item 3(j) A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J)"
 - () BNY Mellon Capital Markets, LLC
 - (X) MBSC Securities Corporation
 - () Pershing LLC
- (D) The Item 3 classification of each of the subsidiaries listed below is "Item 3(g) a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G)"
 - (X) The Bank of New York Mellon Corporation
 - (X) B.N.Y. Holdings (Delaware) Corporation (parent holding company of BNY Mellon Trust of Delaware)
 - (X) BNY Mellon IHC, LLC (as parent holding company of MBC Investments Corporation)
 - (X) MBC Investments Corporation (parent holding company of BNY Mellon Asset Management North America Corporation; BNY Mellon Investment; Management (Jersey) Ltd.; BNY Mellon Investment Management APAC LP; The Dreyfus Corporation; ARX Investimentos Ltda.; Mellon Global Investing Corporation)
 - (X) BNY Mellon Investment Management (Jersey) Ltd. (parent holding company of BNY Mellon Investment Management (Europe) Ltd.)
 - (X) BNY Mellon Investment Management (Europe) Ltd. (parent holding company of BNY Mellon Investment Management Europe Holdings Ltd.; BNY Mellon Investment Management Cayman Ltd.)
 - (X) BNY Mellon Investment Management Europe Holdings Ltd. (parent holding company of BNY Mellon International Asset Management Group Limited)
 - (X) BNY Mellon International Asset Management Group Limited (parent holding company of Newton Management Limited; BNY Mellon International Asset Management (Holdings) Limited; Insight Investment Management Limited)
 - (X) Newton Management Limited (parent holding company of Newton Investment Management (North America) Limited; Newton Investment Management Limited)
 - () BNY Mellon International Asset Management (Holdings) Limited (parent holding company of BNY Mellon International Asset Management (Holdings) No. 1 Limited)
 - () BNY Mellon International Asset Management (Holdings) No. 1 Limited (parent holding company of Walter Scott & Partners Limited)
 - () Insight Investment Management Limited (parent holding company of Insight Investment Management (Global) Limited; Insight Investment International Limited)
 - () BNY Mellon Investment Management APAC LP (Parent holding company of BNY Mellon Investment Management (APAC) Holdings Limited
 - () BNY Mellon Investment Management (APAC) Holdings Limited (parent holding company of BNY Mellon Asset Management Japan Limited)
 - (X) Pershing Group LLC (parent holding company of Lockwood Advisors, Inc; Pershing LLC)
 - () Mellon Overseas Investment Corporation (parent holding company of Mellon Canada Holding Company; BNY Mellon Participacoes Ltda.)
 - () Mellon Canada Holding Company (parent holding company of BNY Mellon Wealth Management, Advisory Services, Inc)
 - () BNY Mellon Participacoes Ltda.(parent holding company of BNY Mellon Servicos Financeiros Distribuidora de Titulos e Valores Mobiliarios S.A.)
 - () BNY International Financing Corporation (parent holding company of BNY Mellon Trust Company (Cayman) Limited)
 - () BNY Capital Markets Holdings, Inc. (parent holding company of

BNY Mellon Capital Markets, LLC)
() Mellon Global Investing Corporation (parent holding company of Insight North America LLC)

NOTE: ALL OF THE LEGAL ENTITIES LISTED UNDER (A), (B), (C) AND (D) ABOVE ARE DIRECT OR INDIRECT SUBSIDIARIES OF THE BANK OF NEW YORK MELLON CORPORATION. BENEFICIAL OWNERSHIP OF MORE THAN FIVE PERCENT OF THE CLASS BY ANY ONE OF THE SUBSIDIARIES OR INTERMEDIATE PARENT HOLDING COMPANIES LISTED ABOVE IS REPORTED ON A JOINT REPORTING PERSON PAGE FOR THAT SUBSIDIARY ON THE ATTACHED SCHEDULE 13G AND IS INCORPORATED IN THE TOTAL PERCENT OF CLASS REPORTED ON THE BANK OF NEW YORK MELLON CORPORATION'S REPORTING PERSON PAGE. (DO NOT ADD THE SHARES OR PERCENT OF CLASS REPORTED ON EACH JOINT REPORTING PERSON PAGE ON THE ATTACHED SCHEDULE 13G TO DETERMINE THE TOTAL PERCENT OF CLASS FOR THE BANK OF NEW YORK MELLON CORPORATION).

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each of the undersigned (each a "Company") does hereby make, constitute and appoint each of Nicholas R. Darrow, Ivan Arias and Andrew Weiser (and any other employee of The Bank of New York Mellon Corporation, or one of its affiliates, associated with the Global Holdings Reporting Group and designated in writing by one of the attorneys-in-fact), acting individually, its true and lawful attorney to execute and deliver in its name and on its behalf, whether the Company is acting individually or as representative of others, any and all filings, be they written or oral, required to be made by the Company with respect to securities which may be deemed to be beneficially owned by the Company or under the Company's investment discretion under:

*the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including those filings required to be submitted on Form 13F, Schedule 13G, Schedule 13D and Forms 3, 4 and 5, and

*the laws of any jurisdiction other than the United States of America, including those filings made to disclose securities holdings as required to be submitted to regulatory agencies, exchanges and/or issuers,

giving and granting unto each said attorney-in-fact power and authority to correspond with issuers, regulatory authorities, and other entities as is required in support of the filings referenced above, and to act in the premises as fully and to all intents and purposes as the Company might or could do to comply with the applicable regulations if personally present by one of its authorized signatories (including, but not limited to, instructing local counsel on a Company's behalf), hereby ratifying and confirming all that said attorney-in-fact shall lawfully do or cause

THIS POWER OF ATTORNEY shall remain in full force and effect until either revoked in writing by the Company or until such time as the person or to whom power of attorney has been hereby granted cease(s) to be an persons employee of The Bank of New York Mellon Corporation or one of its affiliates.

This Power of Attorney may be executed in any number of counterparts all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned hereby execute this Agreement effective as of the date set forth below.

Banks/Bank H	olding Companies
THE BANK OF NEW YORK MELLON CORPORATION	BNY MELLON, NATIONAL ASSOCIATION
By: /S/ MITCHELL E.HARRIS	By: /S/ DONALD HEBERLE
Mitchell E. Harris Chief Executive Officer, Investment Management	Donald Heberle Chief Executive Officer
Date: March 17, 2017	Date: September 16, 2015
BNY MELLON, NATIONAL ASSOCIATION	THE BANK OF NEW YORK MELLON SA/NV
By: /S/ THOMAS J. DICKER	By: /S/ LAURA AHTO
Thomas J. Dicker Chief Operating Officer Date: October 9, 2015	Laura Ahto Chief Executive Officer Date: May 17, 2016
THE BANK OF NEW YORK MELLON	THE BANK OF NEW YORK MELLON
By: /S/ MITCHELL E. HARRIS	By: /S/ CURTIS ARLEDGE
Mitchell E. Harris Senior Executive Vice President Date: September 18, 2015	Curtis Arledge Vice Chairman Date: August 26, 2015
THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION	THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION
By: /S/ ANTONIO PORTUONDO	By: /S/ KURTIS R. KURIMSKY
Antonio Portuondo President Date: October 20, 2015	Kurtis R. Kurimsky Executive Vice President Date: March 8, 2016
BNY MELLON TRUST OF DELAWARE	BNY MELLON TRUST OF DELAWARE
By: /S/ JAMES P. AMBAGIS	By: /S/ LEE JAMES WOOLLEY
James P. Ambagis President	Lee James Woolley Chairman and Chief Executive Officer
Date: October 21, 2015	Date: October 19, 2015
Investment Adviser	s and/or Broker-Dealers
PERSHING LLC	BNY MELLON CAPITAL MARKETS, LLC
By: /S/ CLAIRE SANTANIELLO	By: /S/ JEFF GEARHART

Claire Santaniello

Chief Administrative Officer and Chief Risk Officer

Date: May 24, 2016

Date: October 19, 2016

Jeff Gearhart

ARX INVESTIMENTOS LTDA

By: /S/ CAMILA SOUZA

Camila Souza Director

Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES

MOBILIARIOS S.A.

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON ADMINISTRACAO DE ATIVOS

T.TDA

By: /S/ CARLOS ALBERTO SARAIVA

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

LTDA

By: /S/ GUSTAVO CASTELLO BRANCO

Gustavo Castello Branco

Director

Date: January 4, 2016

THE DREYFUS CORPORATION

By: /S/ JAMES BITETTO

James Bitetto

Secretary

Date: July 30, 2015

LOCKWOOD ADVISORS, INC.

By: /S/ JOHN J. BRETT

John J. Brett

Chairman

ARX INVESTIMENTOS LTDA

By: /S/ GUILHERME ABRY

Chief Operating Officer

Guilherme Abry

Director

Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES

MOBILIARIOS S.A.

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

BNY MELLON ADMINISTRACAO DE ATIVOS

LTDA

By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

LTDA

By: /S/ CAMILA SOUZA

Camila Souza Director

Date: January 4, 2016

INSIGHT INVESTMENT MANAGEMENT

(GLOBAL) LIMITED

By: /s/ CHARLES FARQUHARSON

Charles Farquharson

Chief Risk Officer

Date: February 16, 2016

BNY MELLON ASSET MANAGEMENT JAPAN

LIMITED

By: /S/ SHIZU KISHIMOTO

Shizu Kishimoto

Representative Director

and President

Date: August 5, 2015

BNY MELLON ASSET MANAGEMENT NORTH AMERICA CORPORATION

MBSC SECURITIES CORPORATION

By: /S/ JENNIFER CASSEDY

Date: July 30, 2015

Kenneth J. Bradle

By: /S/ KENNETH J. BRADLE

Jennifer Casseqy Chief Compliance Officer

President

Date: February 14, 2018

Date: April 29, 2016

NEWTON INVESTMENT MANAGEMENT LIMITED

NEWTON INVESTMENT MANAGEMENT (NORTH AMERICA) LIMITED

By: /S/ JAMES HELBY

By: /S/ JAMES HELBY

James Helby

Director

James Helby

Date: July 17, 2015

Chief Risk Officer Date: June 30, 2016

WALTER SCOTT & PARTNERS LIMITED

INSIGHT INVESTMENT INTERNATIONAL LIMITED

By: /S/ RODGER NISBET

By: /S/ LEE PALMER

______ Rodger Nisbet

Executive Chairman Date: July 15, 2015

Lee Palmer

BNY MELLON WEALTH MANAGEMENT,

Chief Compliance Officer Date: February 14, 2018

BNY MELLON INVESTMENT MANAGEMENT

ADVISORY SERVICES, INC.

CAYMAN LTD

By: /S/ MARIE-CLAUDE LEPAGE

By: /S/ BRENDON J. DONNELLAN _____

_____ Marie-Claude Lepage

Brendon J.Donnellan

Chief Compliance Officer Date: May 9, 2016

Date: August 22, 2016

Director

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

By: CANELLA SECRETARIES

By: CANELLA SECRETARIES

(CAYMAN) LTD, SECRETARY

(CAYMAN) LTD, SECRETARY By: /S/ PATRICIA BRUZIO

By: /S/GILLIAN NELSON _____

Gillian Nelson Authorized Person Patricia Bruzio

Date: May 17, 2016

Authorized Person Date: May 17, 2016

INSIGHT NORTH AMERICA LLC

By: /S/ JOHN ARIOLA

John Ariola

Head of Financial Analysis

Date: December 7, 2016

Parent Holding Companies/Control Persons ______ B.N.Y. HOLDINGS (DELAWARE) CORPORATION PERSHING GROUP LLC By: /S/ CLAIRE SANTANIELLO By: /S/ JAMES P. AMBAGIS James P. Ambagis Claire Santaniello Chief Administrative Officer President and Chief Risk Officer Date: October 21, 2015 Date: May 11, 2016 BNY MELLON INVESTMENT MANAGEMENT BNY MELLON INVESTMENT MANAGEMENT (APAC) HOLDINGS LIMITED (APAC) HOLDINGS LIMITED By: /S/ EMILY CHAN By: /S/ DONI SHAMSUDDIN _____ _____ Emily Chan Doni Shamsuddin Director Director Date: April 19, 2016 Date: April 19, 2016 BNY MELLON INTERNATIONAL ASSET NEWTON MANAGEMENT LIMITED MANAGEMENT GROUP LIMITED By: /S/ GREG BRISK By: /S/ HELENA MORRISSEY ______ _____ Helena Morrissey Greg Brisk Director Director Date: October 21, 2015 Date: July 17, 2015 BNY MELLON IHC, LLC MBC INVESTMENTS CORPORATION By: /S/ KURTIS R. KURIMSKY By: /S/ PAUL A. GRIFFITHS -----Kurtis R. Kurimsky Paul A. Griffiths Vice President and Chairman, President and Controller Chief Executive Officer Date: March 29, 2017 Date: April 29, 2016 MELLON OVERSEAS INVESTMENT INSIGHT INVESTMENT MANAGEMENT CORPORATION LIMITED By: /S/ KURTIS R. KURIMSKY By: /S/ CHARLES FARQUHARSON _____ _____ Kurtis R. Kurimsky Charles Farquharson Vice President and Controller Chief Risk Officer Date: October 7, 2015 Date: February 16, 2016 BNY INTERNATIONAL FINANCING BNY INTERNATIONAL FINANCING CORPORATION CORPORATION By: /S/ KURTIS R. KURIMSKY By: /S/ JOHN M. ROY _____ _____

John M. Roy

Kurtis R. Kurimsky

President and Comptroller Vice President Date: August 15, 2016 Date: May 12, 2016

BNY MELLON INVESTMENT MANAGEMENT

EUROPE HOLDINGS LIMITED

By: /S/ GREG BRISK

Greq Brisk Director

Date: October 21, 2015

(JERSEY) LIMITED

By: /S/ GREG BRISK

Director

_____ Greg Brisk

Date: October 21, 2015

BNY MELLON INTERNATIONAL ASSET MANAGEMENT (HOLDINGS) LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

MELLON CANADA HOLDING COMPANY

By: /S/ KELLY SCHWARTZ

Kelly Schwartz

President and Director

Date: May 3, 2016

BNY MELLON PARTICIPACOES LTDA

By: /S/ CARLOS ALBERTO SARAIVA

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON INVESTMENT MANAGEMENT

By: BNY MELLON INVESTMENT MANAGEMENT HOLDINGS, LLC, GENERAL PARTNER

By: /S/ PAUL A. GRIFFITHS

Paul A. Griffiths

President

Date: April 29, 2016

BNY MELLON INVESTMENT MANAGEMENT

(EUROPE) LIMITED

By: /S/ GREG BRISK

Greq Brisk Director

Date: October 21, 2015

BNY MELLON INVESTMENT MANAGEMENT BNY CAPITAL MARKETS HOLDINGS, INC.

By: /S/ THOMAS P. GIBBONS

Thomas P. Gibbons Vice Chairman and Chief Financial Officer Date: October 24, 2015

BNY MELLON INTERNATIONAL ASSET MANAGEMENT (HOLDINGS) No. 1 LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

BNY MELLON PARTICIPACOES LTDA

By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

_____ Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

MELLON GLOBAL INVESTING CORPORATION

By: /S/ LEO P. GROHOWSKI

Leo P . Grohowski

President

Date: June 29, 2018

______ Fund Administrators ______ BNY MELLON SERVICE KAPITALANLAGE-BNY MELLON SERVICE KAPITALANLAGE-GESELLSCHAFT mbH GESELLSCHAFT mbH By: /S/ KATARINA MELVAN By: /S/ CAROLINE SPECHT _____ _____ Katarina Melvan Caroline Specht Managing Director (Chairman) Managing Director Date: August 19, 2016 Date: August 19, 2016 JOINT FILING AGREEMENT In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the undersigned hereby agree to any and all joint filings required to be made on their behalf on Schedule 13G (including amendments thereto) under the Exchange Act, with respect to securities which may be deemed to be beneficially owned by them under the Exchange Act, and that this Agreement be included as an Exhibit to any such joint filing. This Agreement may be executed in any number of counterparts all of which taken together shall constitute one and the same instrument. IN WITNESS WHEREOF, the undersigned hereby execute this Agreement effective as of the date set forth below. Banks/Bank Holding Companies ______ THE BANK OF NEW YORK MELLON BNY MELLON, NATIONAL ASSOCIATION CORPORATION By: /S/ DONALD HEBERLE By: /S/ MITCHELL E.HARRIS Mitchell E. Harris Donald Heberle Chief Executive Officer, Chief Executive Officer Investment Management Date: March 17, 2017 Date: September 16, 2015 BNY MELLON, NATIONAL ASSOCIATION THE BANK OF NEW YORK MELLON SA/NV By: /S/ THOMAS J. DICKER By: /S/ LAURA AHTO ______ Thomas J. Dicker Laura Ahto Chief Operating Officer Chief Executive Officer Date: October 9, 2015 Date: May 17, 2016 THE BANK OF NEW YORK MELLON THE BANK OF NEW YORK MELLON By: /S/ MITCHELL E. HARRIS By: /S/ CURTIS ARLEDGE

Mitchell E. Harris Senior Executive Vice President

Date: August 27, 2015

Curtis Arledge Vice Chairman Date: August 26, 2015

THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION

THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION

By: /S/ ANTONIO PORTUONDO

Antonio Portuondo

President.

Date: October 20, 2015

By: /S/ KURTIS R. KURIMSKY Kurtis R. Kurimsky

Executive Vice President

Date: March 8, 2016

BNY MELLON TRUST OF DELAWARE

By: /S/ JAMES P. AMBAGIS

-----James P. Ambagis

Date: October 21, 2015

President

BNY MELLON TRUST OF DELAWARE

By: /S/ LEE JAMES WOOLLEY _____

> Lee James Woolley Chairman and

Chief Executive Officer

Date: October 19, 2015

______ Investment Advisers and/or Broker-Dealers ______

PERSHING LLC

BNY MELLON CAPITAL MARKETS, LLC

By: /S/ CLAIRE SANTANIELLO -----

Claire Santaniello

Chief Administrative Officer and Chief Risk Officer

Date: May 24, 2016

By: /S/ JEFF GEARHART

Jeff Gearhart

Date: October 19, 2016

Chief Operating Officer

ARX INVESTIMENTOS LTDA

By: /S/ CAMILA SOUZA

Camila Souza Director

Date: January 4, 2016

ARX INVESTIMENTOS LTDA

By: /S/ GUILHERME ABRY

Guilherme Abry Director

Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES

MOBILIARIOS S.A.

By: /S/ CARLOS ALBERTO SARAIVA

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES MOBILIARIOS S.A.

By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

LTDA

BNY MELLON ADMINISTRACAO DE ATIVOS BNY MELLON ADMINISTRACAO DE ATIVOS LTDA

By: /S/ CARLOS ALBERTO SARAIVA -----

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

By: /S/ GUSTAVO CASTELLO BRANCO By: /S/ CAMILA SOUZA

Gustavo Castello Branco Director

Date: January 4, 2016

THE DREYFUS CORPORATION

By: /S/ JAMES BITETTO

James Bitetto Secretary

Date: July 30, 2015

LOCKWOOD ADVISORS, INC.

By: /S/ JOHN J. BRETT

John J. Brett Chairman

Date: July 30, 2015

BNY MELLON ASSET MANAGEMENT NORTH AMERICA CORPORATION

By: /S/ JENNIFER CASSEDY

Jennifer Cassedy Chief Compliance Officer

Date: February 14, 2018

NEWTON INVESTMENT MANAGEMENT LIMITED

By: /S/ JAMES HELBY

James Helby Director

Date: July 17, 2015

WALTER SCOTT & PARTNERS LIMITED

By: /S/ RODGER NISBET

Rodger Nisbet

By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

Camila Souza Director

Date: January 4, 2016

INSIGHT INVESTMENT MANAGEMENT

(GLOBAL) LIMITED

By: /s/ CHARLES FARQUHARSON

-----Charles Farquharson Chief Risk Officer

Date: February 16, 2016

BNY MELLON ASSET MANAGEMENT JAPAN

By: /S/ SHIZU KISHIMOTO

Shizu Kishimoto

Representative Director

and President

Date: August 5, 2015

MBSC SECURITIES CORPORATION

By: /S/ KENNETH J. BRADLE

Kenneth J. Bradle

President

Date: April 29, 2016

NEWTON INVESTMENT MANAGEMENT

(NORTH AMERICA) LIMITED

By: /S/ JAMES HELBY

James Helby

Chief Risk Officer Date: June 30, 2016

INSIGHT INVESTMENT INTERNATIONAL

LIMITED

By: /S/ LEE PALMER

Lee Palmer

Executive Chairman Date: July 15, 2015

Chief Compliance Officer Date: February 14, 2018

BNY MELLON WEALTH MANAGEMENT, ADVISORY SERVICES, INC.

BNY MELLON INVESTMENT MANAGEMENT CAYMAN LTD

By: /S/ MARIE-CLAUDE LEPAGE

By: /S/ BRENDON J. DONNELLAN

Marie-Claude Lepage Chief Compliance Officer

Brendon J.Donnellan Director

Date: May 9, 2016

Date: August 22, 2016

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

By: CANELLA SECRETARIES (CAYMAN) LTD, SECRETARY By: CANELLA SECRETARIES (CAYMAN) LTD, SECRETARY

By: /S/GILLIAN NELSON ----- By: /S/ PATRICIA BRUZIO -----

Gillian Nelson Authorized Person Date: May 17, 2016

Patricia Bruzio Authorized Person Date: May 17, 2016

INSIGHT NORTH AMERICA LLC

By: /S/ JOHN ARIOLA

John Ariola

Head of Financial Analysis

Date: December 7, 2016

______ Parent Holding Companies/Control Persons ______

B.N.Y. HOLDINGS (DELAWARE) CORPORATION PERSHING GROUP LLC

By: /S/ JAMES P. AMBAGIS James P. Ambagis

By: /S/ CLAIRE SANTANIELLO

President

Claire Santaniello Chief Administrative Officer

Date: October 21, 2015

and Chief Risk Officer Date: May 11, 2016

BNY MELLON INVESTMENT MANAGEMENT (APAC) HOLDINGS LIMITED

BNY MELLON INVESTMENT MANAGEMENT (APAC) HOLDINGS LIMITED

By: /S/ EMILY CHAN

By: /S/ DONI SHAMSUDDIN

Emily Chan Director

Doni Shamsuddin Director

Date: April 19, 2016

Date: April 19, 2016

BNY MELLON INTERNATIONAL ASSET NEWTON MANAGEMENT LIMITED

MANAGEMENT GROUP LIMITED

By: /S/ GREG BRISK _____

Greg Brisk

Director Date: October 21, 2015

BNY MELLON IHC, LLC

By: /S/ KURTIS R. KURIMSKY

_____ Kurtis R. Kurimsky Vice President and Controller

Date: March 29, 2017

MELLON OVERSEAS INVESTMENT CORPORATION

By: /S/ KURTIS R. KURIMSKY _____

Kurtis R. Kurimsky Vice President and Controller

Date: October 7, 2015

BNY INTERNATIONAL FINANCING CORPORATION

By: /S/ KURTIS R. KURIMSKY _____

Kurtis R. Kurimsky President and Comptroller

Date: May 12, 2016

BNY MELLON INVESTMENT MANAGEMENT EUROPE HOLDINGS LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

BNY MELLON INVESTMENT MANAGEMENT (JERSEY) LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

By: /S/ GREG BRISK

By: /S/ HELENA MORRISSEY _____

Helena Morrissey

Director

Date: July 17, 2015

MBC INVESTMENTS CORPORATION

By: /S/ PAUL A. GRIFFITHS

_____ Paul A. Griffiths

Chairman, President and Chief Executive Officer

Date: April 29, 2016

INSIGHT INVESTMENT MANAGEMENT

LIMITED

By: /S/ CHARLES FARQUHARSON -----

> Charles Farquharson Chief Risk Officer Date: February 16, 2016

BNY INTERNATIONAL FINANCING CORPORATION

By: /S/ JOHN M. ROY

John M. Roy Vice President Date: August 15, 2016

BNY MELLON INVESTMENT MANAGEMENT (EUROPE) LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

BNY CAPITAL MARKETS HOLDINGS, INC.

By: /S/ THOMAS P. GIBBONS

Thomas P. Gibbons Vice Chairman and Chief Financial Officer

Date: October 24, 2015

BNY MELLON INTERNATIONAL ASSET
MANAGEMENT (HOLDINGS) LIMITED

BNY MELLON INTERNATIONAL ASSET
MANAGEMENT (HOLDINGS) No. 1 LIMITED

By: /S/ GREG BRISK

Greg Brisk Greg Brisk Director Director Date: October 21, 2015 Date: October 21, 2015 MELLON CANADA HOLDING COMPANY By: /S/ KELLY SCHWARTZ Kelly Schwartz President and Director Date: May 3, 2016 BNY MELLON PARTICIPACOES LTDA BNY MELLON PARTICIPACOES LTDA By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA ----------Carlos Alberto Saraiva Marcus Vinicius Mathias Pereira Director Director Date: May 5, 2016 Date: May 5, 2016 BNY MELLON INVESTMENT MANAGEMENT MELLON GLOBAL INVESTING CORPORATION By: BNY MELLON INVESTMENT MANAGEMENT HOLDINGS, LLC, GENERAL PARTNER By: /S/ PAUL A. GRIFFITHS By: /S/ LEO P. GROHOWSKI _____ _____ Leo P . Grohowski Paul A. Griffiths President President Date: April 29, 2016 Date: June 29, 2018 ______ Fund Administrators ______ BNY MELLON SERVICE KAPITALANLAGE- BNY MELLON SERVICE KAPITALANLAGE-GESELLSCHAFT mbH GESELLSCHAFT mbH By: /S/ CAROLINE SPECHT By: /S/ KATARINA MELVAN _____ _____ Caroline Specht Katarina Melvan Managing Director(Chairman) Managing Director

Date: August 19, 2016

Date: August 19, 2016