BROOKS AUTOMATION INC Form SC 13D/A September 26, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D Under the Securities Exchange Act of 1934 (Amendment No. 7)

BROOKS AUTOMATION, INC. (BRKS) ______ (Name of Issuer) Common Stock (Title of Class of Securities) 114340102 (CUSIP Number)

> David Nierenberg The D3 Family Funds 19605 NE 8th Street Camas, WA 98607 (360) 604-8600

With a copy to:

Henry Lesser, Esq. DLA Piper US LLP 2000 University Avenue East Palo Alto, CA 94303 (650) 833-2000

______ (Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

September 25, 2007

______ (Date of Event which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box [_].

CUSIP No.114340102

NAME OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON

	The D3 Fa	mily	Fund, L.P.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*				[X]	
3	SEC USE O	NLY				
4 SOURCE OF FUNDS*						
	WC 					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) [_]					
6	 CITIZENSH	IP OF	R PLACE OF ORGANIZATION			
	Washingto	n				
		7	SOLE VOTING POWER			
			849,215 Common Shares (1.2%)			
N	UMBER OF	8	SHARED VOTING POWER			
BENI	SHARES EFICIALLY WNED BY EACH EPORTING PERSON WITH		0			
		9	SOLE DISPOSITIVE POWER			
			849,215			
		10	SHARED DISPOSITIVE POWER			
			0			
11	AGGREGATE	JOMA	JNT BENEFICIALLY OWNED BY EACH REPORTING PERSO	ON		
			ring person listed on this page, 849,215; for group, 5,056,958 shares (7.2%)	all r	reporting	3
12	CHECK BOX	IF 7	THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CER	TAIN S	SHARES*	[_]
13	PERCENT O	F CL	ASS REPRESENTED BY AMOUNT IN ROW (11)			
	7.2%					
14	TYPE OF R	EPORT	TING PERSON*			_
	PN					
			*SEE INSTRUCTIONS BEFORE FILLING OUT!			

2

1 NAME OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON								
	The DIII	The DIII Offshore Fund, L.P.						
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [X] (b) [_]							
3	SEC USE ONLY							
4	SOURCE OF FUNDS*							
	WC 							
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) [_]							
6	CITIZENSH	IP OF	R PLACE OF ORGANIZATION					
	Bahamas							
		7	SOLE VOTING POWER					
			1,131,718 Common Shares (1.6%)					
	UMBER OF SHARES	8	SHARED VOTING POWER					
BENI	EFICIALLY		0					
	NED BY EACH	9	SOLE DISPOSITIVE POWER					
	EPORTING PERSON		1,131,718					
	WITH	10	SHARED DISPOSITIVE POWER					
			0					
11	AGGREGATE	JOMA	JNT BENEFICIALLY OWNED BY EACH REPORTING PERS	ON				
			ring person listed on this page, 1,131,718; f group, 5,056,958 shares (7.2%)	or all	reportin			
12	CHECK BOX	IF :	THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CER	TAIN S	HARES* [
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)							
	7.2%							
14 TYPE OF REPORTING PERSON*		TING PERSON*						
	PN							
			*SEE INSTRUCTIONS BEFORE FILLING OUT!					

3

CUSIP No.114340102 NAME OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON The D3 Family Bulldog Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [X] (b) [_] 3 SEC USE ONLY 4 SOURCE OF FUNDS* WC. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) ______ CITIZENSHIP OR PLACE OF ORGANIZATION Washington _____ 7 SOLE VOTING POWER 2,997,525 Common Shares (4.3%) SHARED VOTING POWER NUMBER OF SHARES BENEFICIALLY OWNED BY SOLE DISPOSITIVE POWER EACH REPORTING PERSON 2,997,525 WITH 10 SHARED DISPOSITIVE POWER Ω 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON For the reporting person listed on this page, 2,997,525; for all reporting persons as a group, 5,056,958 shares (7.2%) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* [_] PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

TYPE OF REPORTING PERSON* PN *SEE INSTRUCTIONS BEFORE FILLING OUT! 4 CUSIP No.114340102 NAME OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON The D3 Family Canadian Fund, L.P. _____ 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [X] (b) [_] 3 SEC USE ONLY SOURCE OF FUNDS* WC. ______ CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) [_] CITIZENSHIP OR PLACE OF ORGANIZATION Washington ______ SOLE VOTING POWER 78,500 Common Shares (0.1%) NUMBER OF 8 SHARED VOTING POWER SHARES BENEFICIALLY 0 OWNED BY _____ 9 SOLE DISPOSITIVE POWER EACH REPORTING PERSON 78,500 _____ 10 SHARED DISPOSITIVE POWER 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON For the reporting person listed on this page, 78,500; for all reporting persons as a group, 5,056,958 shares (7.2%) 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* [_]

13	3 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)					
	7.2%					
14 TYPE OF REPORTING PERSON*						
	PN					
			*SEE INSTRUCTIONS BEFORE FILLING OUT!			
			5			
CIIGI	IP No.11434	10102				
C051	r NO.1143	40102				
1	NAME OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON					
	Nierenber	rg In	vestment Management Company, Inc.			
2	CHECK THE	E APP	ROPRIATE BOX IF A MEMBER OF A GROUP*			
					[X]	
3	SEC USE (ONLY				
4	SOURCE OF	F FUN	 DS*			
	WC					
5	~				[_]	
	1 010071111	10 1			[_]	
6	CITIZENSE	HIP 0	R PLACE OF ORGANIZATION			
Washington						
		7	SOLE VOTING POWER			
			0			
NU	JMBER OF	8	SHARED VOTING POWER			
	SHARES EFICIALLY		5,056,958 Shares (7.2%)			
OM	NNED BY EACH EPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER			
			0			
		10	SHARED DISPOSITIVE POWER			
			5,056,958 Shares			
11	AGGREGATI	E AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSO	 N		
	For the 1	repor	ting person listed on this page, 5,056,958; fo	r all	reporting	

	persons a	ısa	group, 5,056,958 shares (7.2%)			
12	CHECK BOX	IF :	FHE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERT	 ГАІN	SHARES*	[_]
13	PERCENT C	F CL	ASS REPRESENTED BY AMOUNT IN ROW (11)			
	7.2%					
14	TYPE OF F	REPOR	IING PERSON*			
	CO					
			*SEE INSTRUCTIONS BEFORE FILLING OUT!			
			6			
CUS	IP No.11434	0102				
1			FING PERSONS IDENTIFICATION NOS. OF ABOVE PERSON			
	Nierenber	g Inv	vestment Management Offshore, Inc.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [X] (b) [_]					
3	SEC USE C	NLY				
4	SOURCE OF)S*			
	WC					
5			DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED IEMS 2(d) OR 2(e)		[_]	
6	CITIZENSE	IIP O	R PLACE OF ORGANIZATION			
		 7	SOLE VOTING POWER			
		,	0			
	JMBER OF SHARES EFICIALLY	8	SHARED VOTING POWER			
BENI			1,131,718 Common Shares (1.6%)			
	WNED BY EACH	9	SOLE DISPOSITIVE POWER			
	EPORTING PERSON		0			
	WITH	10	SHARED DISPOSITIVE POWER			

1,131,718 Common Shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

For the reporting person listed on this page, 1,131,718; for all reporting persons as a group, 5,056,958 shares (7.2%)

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* [_]

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.2%

14 TYPE OF REPORTING PERSON*

*SEE INSTRUCTIONS BEFORE FILLING OUT!

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CUSIP No.114340102

This Amendment No. 7 to Schedule 13D (this "Amendment") amends the below-indicated items from the Schedule 13D previously filed by or on behalf of the undersigned parties (the "Reporting Person"), as previously amended (the "Schedule 13D"), by supplementing such Items with the information below:

Item 2. Identity and Background.

The Reporting Persons now include The D3 Family Canadian Fund, L.P., a Washington State limited partnership ("D3 Family Canadian Fund") of which Nierenberg Investment Management Company, Inc., a Reporting Person, is the general partner.

Item 3. Source and Amount of Funds or Other Consideration.

The total amount of the funds used to make the purchases reported in Item 5~was~\$1,491,795 and the source of funds for purchases of Shares by each of the D3 Funds (including D3 Family Canadian Fund), is the working capital of the applicable Fund.

Item 4. Purpose of Transaction.

We are calling upon Brooks to commit to an immediate 10 million share repurchase. Our request is made in a letter to CEO-elect Robert Lepofsky and Board Chair Joseph R. Martin. This letter is attached to this filing.

The statements by the Reporting Persons in the above-referenced letter regarding their investment in BRKS represent solely their own analyses and judgments, based on publicly-available information and their own internal evaluation thereof. Those statements are not intended, and should not be relied on, as investment advice to any other investor or prospective investor. To the extent those statements reflect assessments of possible future developments, those assessments are inherently subject to the uncertainties associated with all assessments of future events; actual developments may materially differ as a result of circumstances affecting BRKS and/or extrinsic factors such as developments in the company's industry and the economic environment. The

Reporting Persons reserve the right to change their internal evaluation of this investment in the future, as well as to increase or decrease their investment depending on their evaluation, and to discuss the company and their investment in it with the directors and executive officers of the company and third parties, without further amending the Schedule 13D except as required by applicable rules.

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Item 5. Interest in Securities of the Issuer.

(a, b) The Reporting Persons, in the aggregate, beneficially own 5,056,958 Shares, constituting approximately 7.2% of the outstanding Shares.

(c) During the past sixty (60) days, the following purchases of Shares were made by D3 Family Funds in open market transactions:

Fund	Trade Date	Shares Bought	Price
D3 Family Canadian Fund LP	8/6/2007	5,000	16.00
D3 Family Canadian Fund LP	8/10/2007	73,500	13.51
D3 Family Bulldog Fund LP	8/10/2007	31,000	13.51

Item 7. Material to be filed as Exhibits

Exhibit 1 to this Amendment is the letter $\$ referred to in response to Item 4 of this Amendment.

Exhibit 2 to this Amendment is the Joint Filing Agreement among the Reporting Persons dated August 3, 2007 pursuant to which all of the Reporting Persons have authorized the filing of this Amendment as a group.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, each of the undersigned certifies that the information set forth in the Statement is true, complete and correct.

D3 Family Fund, L.P., D3 Family Bulldog Fund, L.P., and D3 Family Canadian Fund, L.P.

By: Nierenberg Investment Management Company, Inc.

Its: General Partner

September 26, 2007 By: /s/ David Nierenberg

David Nierenberg, President

DIII Offshore Fund, L.P.

By: Nierenberg Investment Management Offshore, Inc.

Its: General Partner

September 26, 2007	By: /s/ David Nierenberg
	David Nierenberg, President
	Nierenberg Investment Management Company, Inc.
September 26, 2007	By: /s/ David Nierenberg
	David Nierenberg, President
	Nierenberg Investment Management Offshore, Inc.
September 26, 2007	By: /s/ David Nierenberg
	David Nierenberg, President
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