

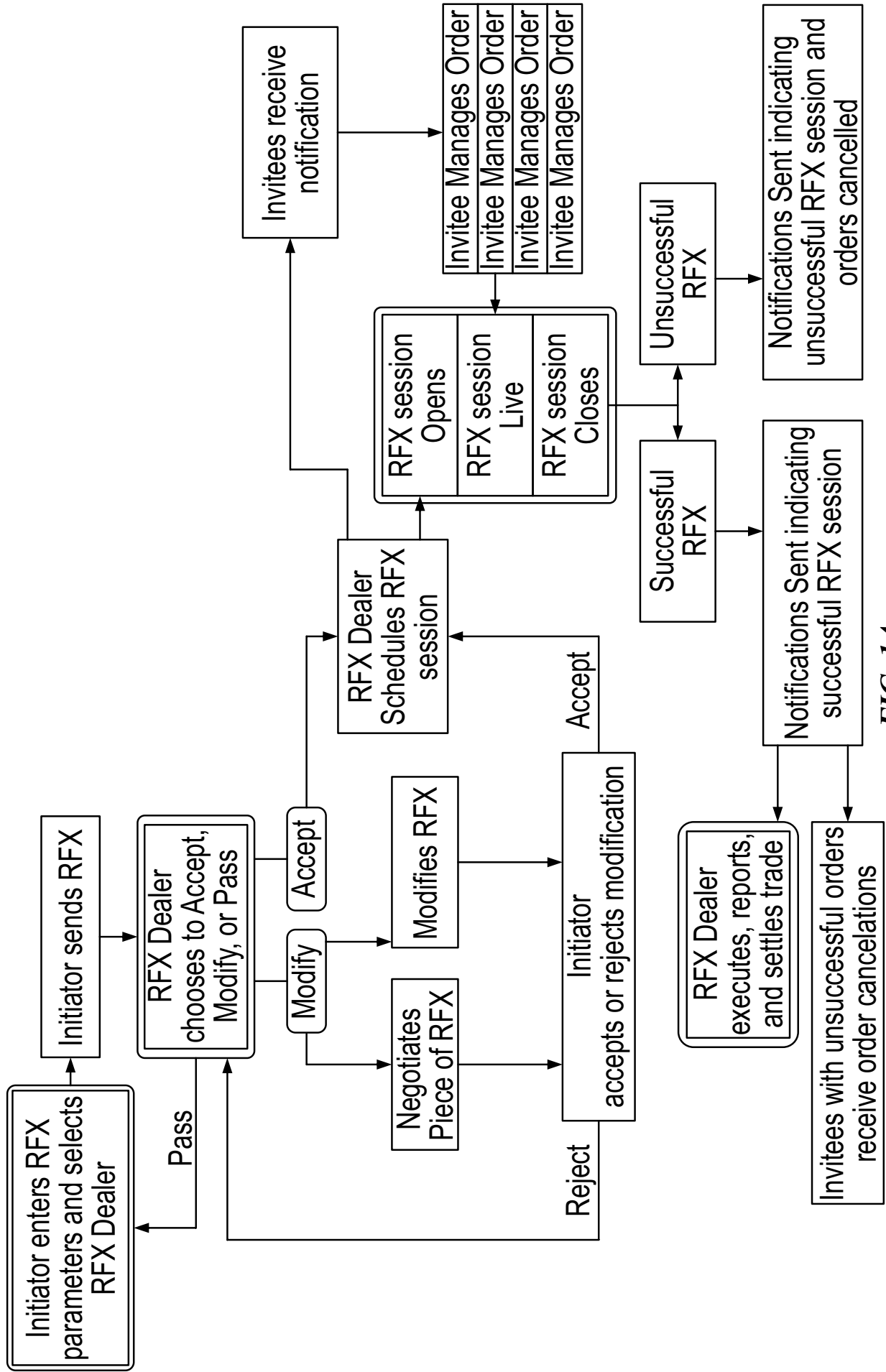


FIG. 1A

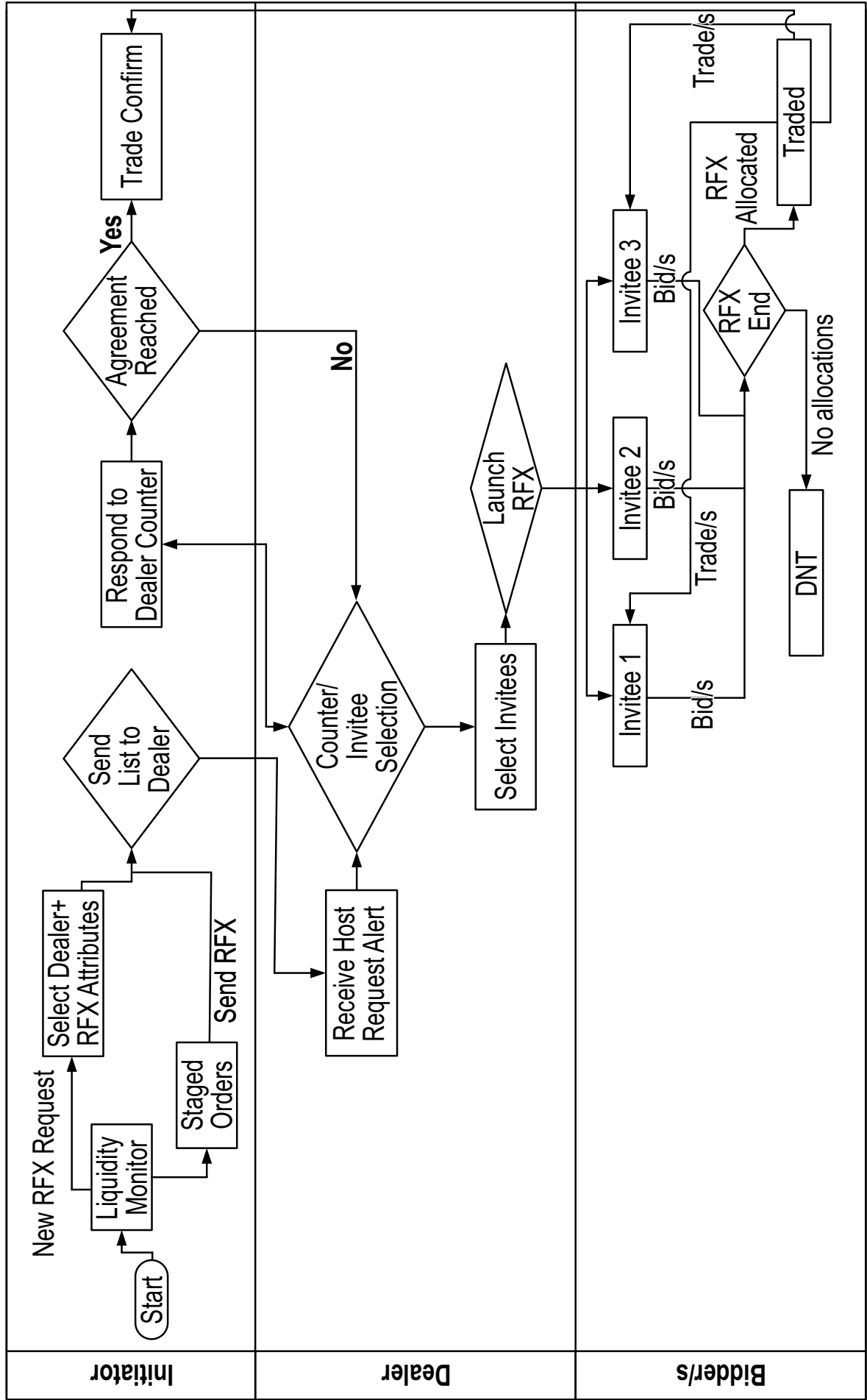


FIG. 1B

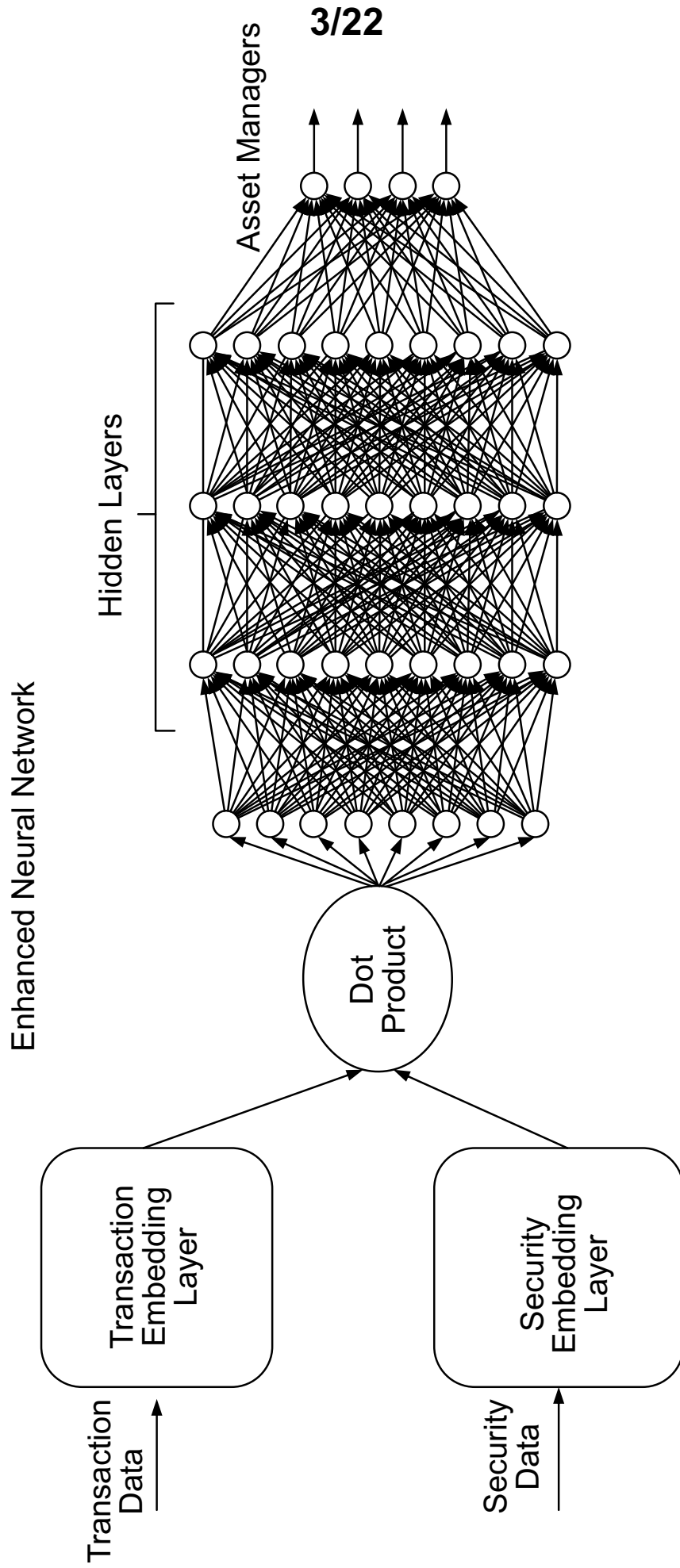


FIG. 2

Step 3: Neural Network Input Data (current state)

Source		
Transaction Data	Security Master	Analytics (calculated based on Trade Time)
Customer Name (Block Trade)	Maturity Date	OAS
Trade Amount	Issue Date	OAS Duration
Trade Date	Industry 1	OAS Convexity
Trade Time	Industry 2	Option Value
Trade Price	Industry 3	CR01
	Industry 4	
	Is_guaranteed	
	Is_factored	
	Is_put	
	Is_call	
	Amount Outstanding	
	Issue Amount	
	Debt Type Code	

FIG. 3

Training vs. Validation Curve

Validation Curve Schematic

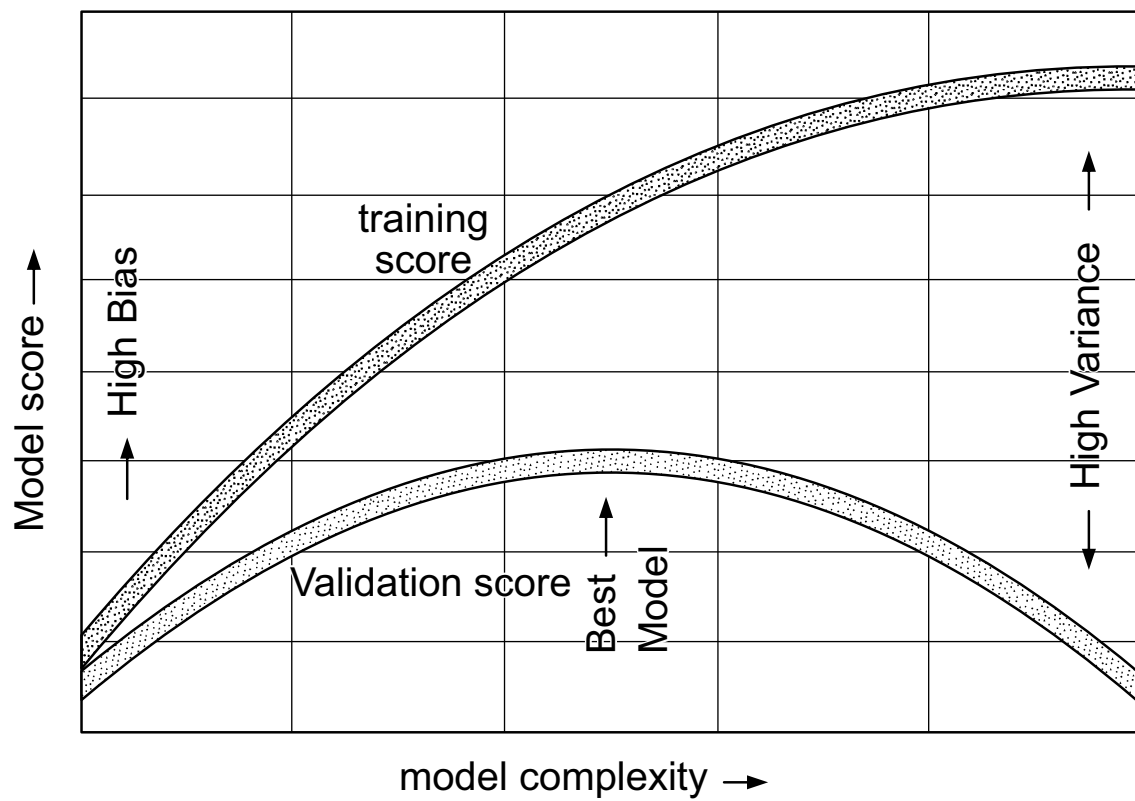


FIG. 4

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3 epochs

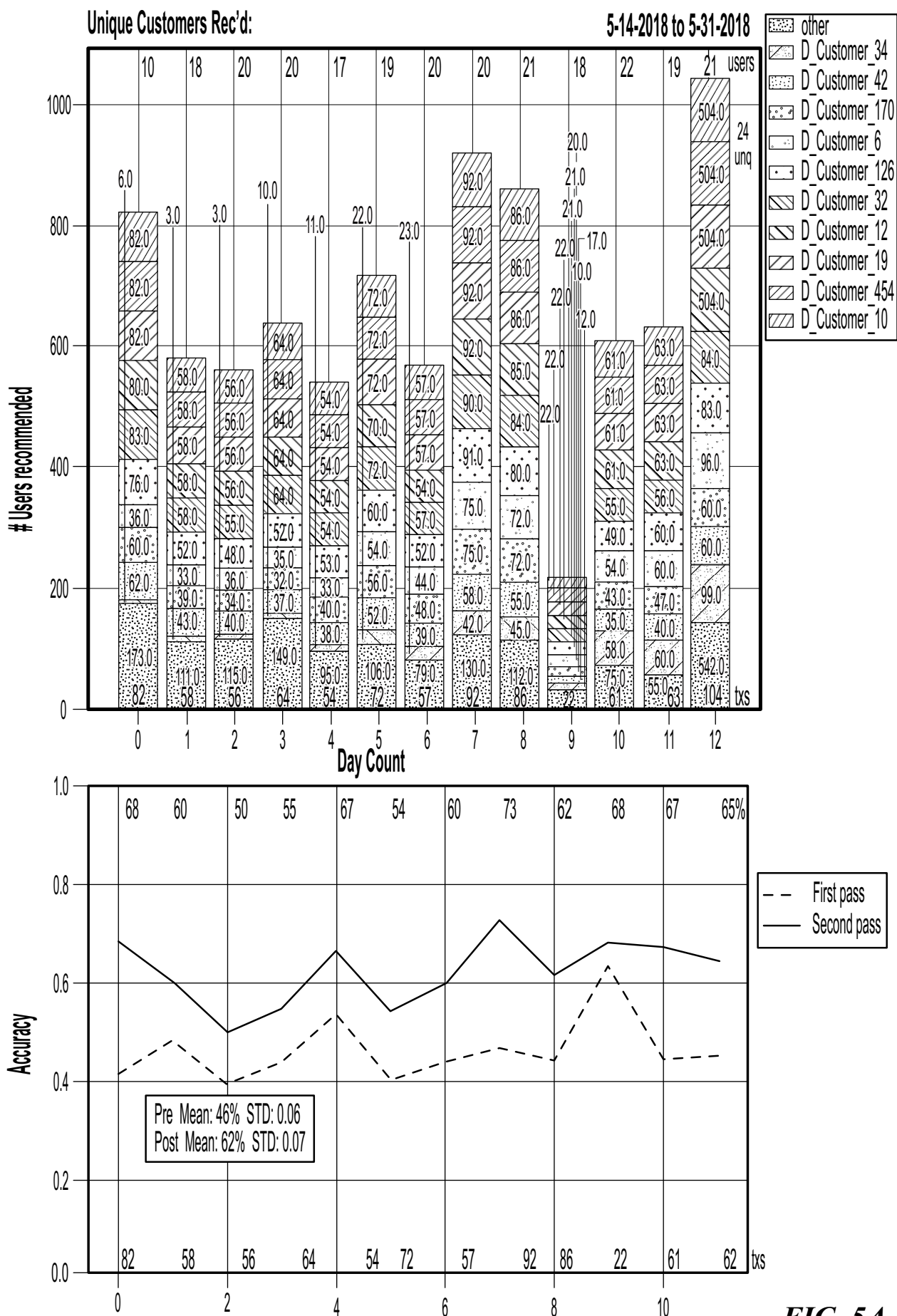


FIG. 5A

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30 epochs

Unique Customers Rec'd:

5-14-2018 to 5-31-2018

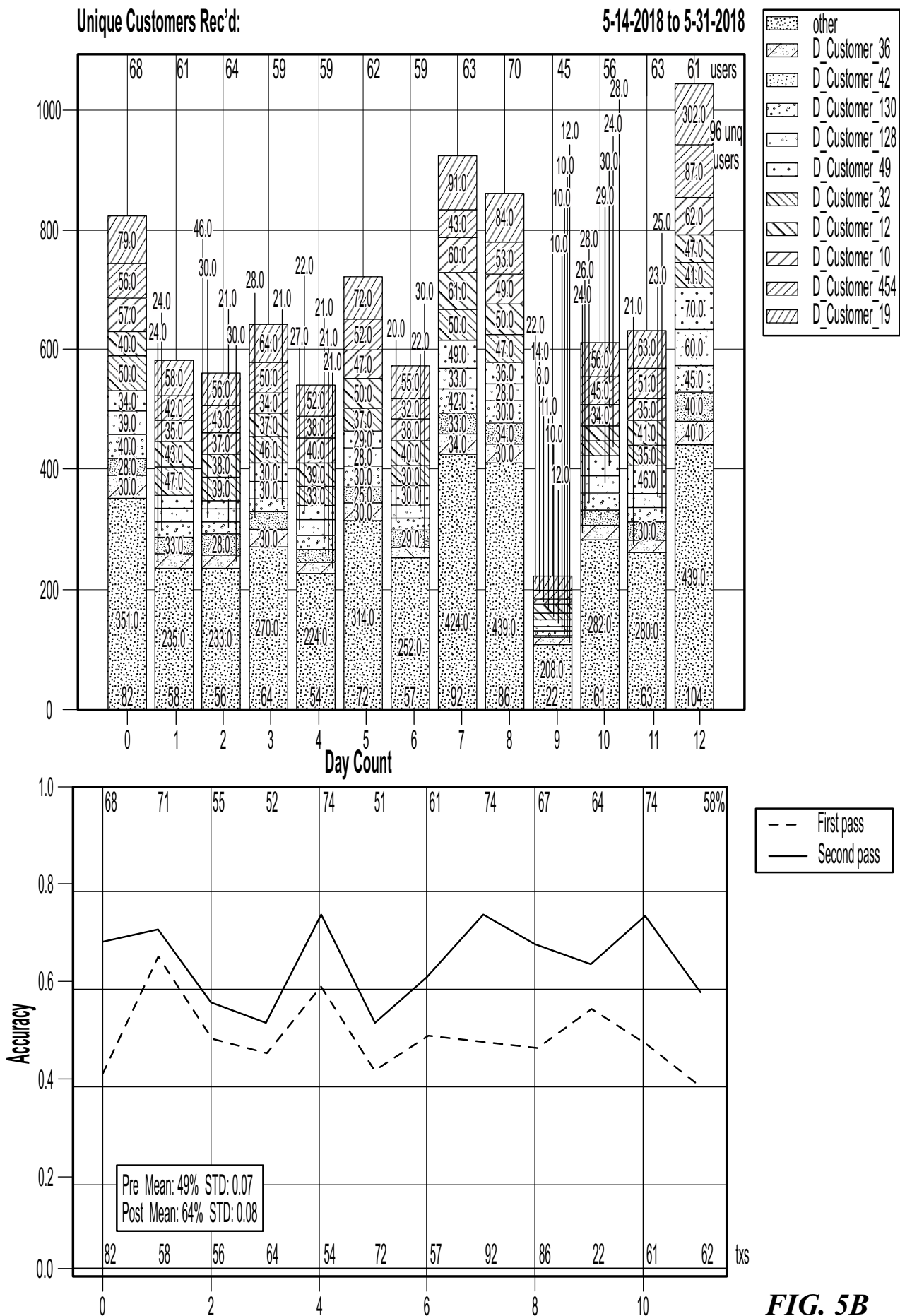


FIG. 5B

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80 epochs

Unique Customers Rec'd:

5-14-2018 to 5-31-2018

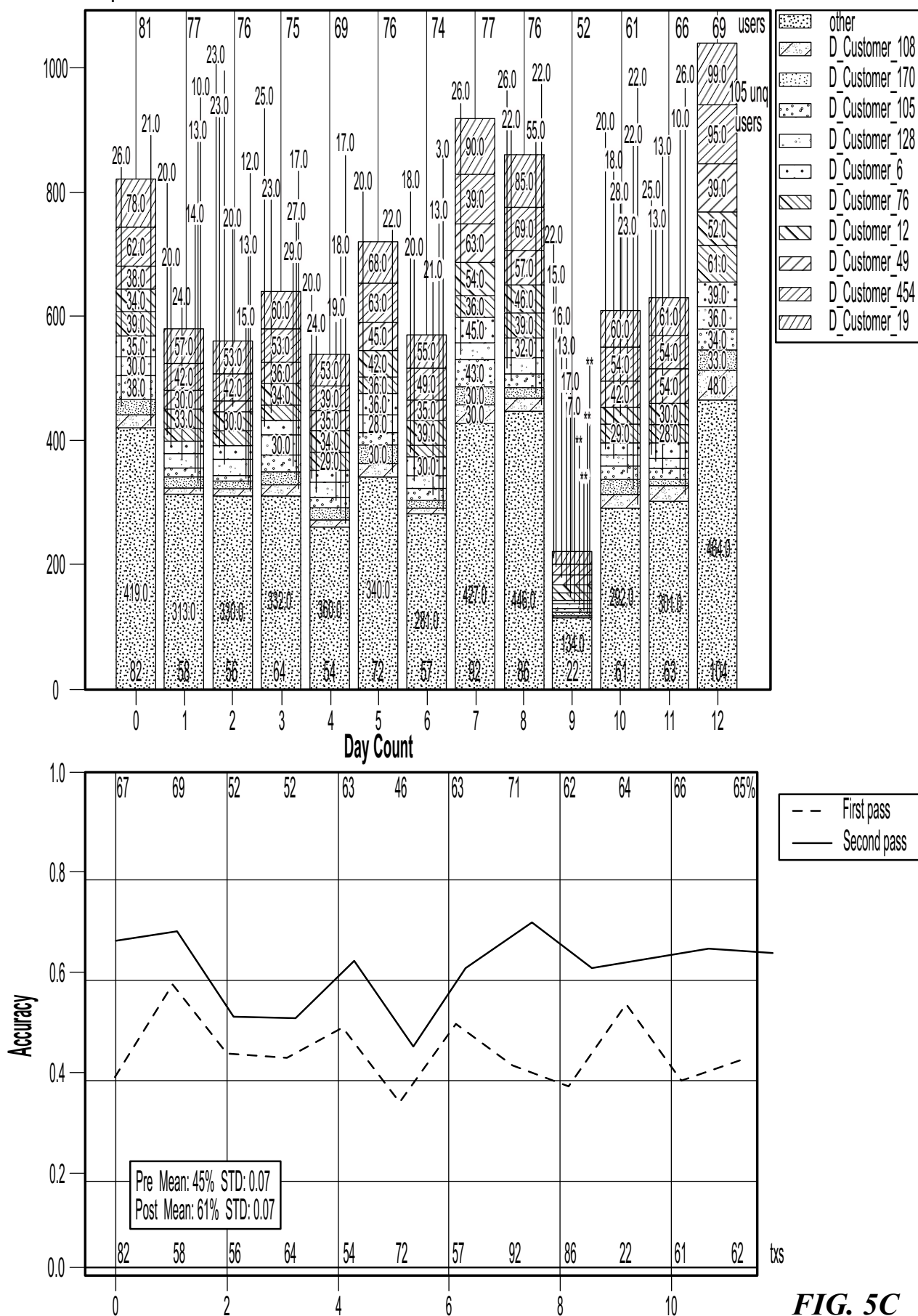


FIG. 5C

Requests										Requests			Import Orders			
Security					B/S	Size (000)	Allocated	Avg Sprd	Time	Security		B/S	Size (000)	Sprd	LIQ	RFX
BBBY 4.915 08/01/2034 07586AB6					Sell	10,000	10,000	100%	+428 01:23 :	CAT 2.400 06/06/2022 14913QAA7		Sell	17,000	+36	9	RFX :
GPS 5.950 04/12/2021 38476DAK4					Sell	12,000	11,000	92%	+198 02:10 :	IBM 5.600 11/03/2039 38476DAK4		Sell	12,150	+103	5	RFX :
IP 7.300 11/15/2039 460146CF8					Buy	15,000	10,000	67%	+199 02:50 :	DE 3.900 06/09/2042 460146CF8		Sell	7,000	+73	8	RFX :
OC 7.000 12/01/2019 890742AB7					Buy	13,000	8,000	62%	+243 05:00 :	OXY 4.200 03/15/2048 674500CN3		Sell	11,750	+109	7	RFX :
PRU 5.100 08/15/2043 74432QBY0					Sell	10,000	6,000	60%	+120 10:12 :	OC 7.000 12/01/2036 890742AB7		Sell	11,200	+243	4	RFX :
F 6.625 10/01/2028 345370BY6					Buy	20,000	14,000	70%	+277 11:45 :	APL 2.900 09/12/2027 607833OB3		Sell	15,010	+74	9	RFX :
										VOYA 4.800 06/15/2046 929080CA4		Sell	10,275	+167	7	RFX :
										MSFT 3.300 02/06/2027 604918BY9		Sell	18,050	+62	4	RFX :
										PRU 6.625 12/01/2037 74432QBO6		Sell	16,900	+147	6	RFX :
										RJF 5.625 04/01/2024 754730AD1		Sell	12,600	+110	7	RFX :
										GE 4.500 03/11/2044 360604BH5		Sell	15,500	+179	5	RFX :
										VZ 8.000 06/01/2022 645767AY0		Sell	25,000	+93	9	RFX :
										PEG 3.600 12/01/2047 74458QBT2		Sell	14,000	+90	8	RFX :
										MRK 2.750 02/10/2025 58933YAR8		Sell	11,000	+53	7	RFX :

X										X									
Requests					%					Requests					%				
Security					B/S	Size (000)	Allocated	Avg Sprd	Time	Security					B/S	Size (000)	Allocated	Avg Sprd	Time
WMB 7.500 01/15/2031 909457BB6					Sell	4,000	3,000	75%	+207 02:25 :	ALLY 4.250 04/15/2021 02006NBG4					Sell	12,000	12,000	100%	+154 03:41 :
APC 7.950 06/15/2039 032511BG1					Buy	5,000	2,500	50%	+233 07:40 :	AA 6.750 01/15/2028 022249AU0					Buy	11,000	7,000	64%	+325 12:00 :
STX 4.750 06/01/2023 81180WAM4					Sell	3,600	1,250	35%	+180 17:29 :	T 7.125 12/15/2031 17246RAJ5					Buy	10,000	1,000	10%	+242 18:16 :

FIG. 6

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YOUR SELL INTENTIONS (Add a Security)					Liquidity Cloud		
Instrument	Direction	Size	Price/Spread	Score	RFX		
VZ 8.000 06/01/2022 645767AY0	Sell	25m	+93	6	8	RFX	
BBBY 4.915 08/01/2034 075896AB6	Sell	1-5m	+80 to +85	4	7	RFX	
GPS 5.950 04/12/2021 38476DAK4	Sell	5m	+90 to +100	5	4	RFX	
IP 7.300 11/15/2039 460146CF8	Sell	5m	+120 to +13-	1	3	RFX	
MARK 2750 02/10/2025 68933YAR5	Sell	5-10m	+70 to +80	5	7	RFX	
CVX 1.961 03/03/2020 166764AR1	Sell	10m	+35 to +40	3	5	RFX	
WMT 4.000 04/11/2043 931142DG5	Sell	12m	+65 to +75	8	8	RFX	
CAT 2.400 06/06/2022 14913QAA7	Sell	4.5m	+30	3	4	RFX	
ALL 5.750 08/15/2053 020002BB6	Sell	10-15M	+25 to +30	4	2	RFX	
DE 3.900 06/09/2042 244199BF1	Sell	15m	+55 to +65	4	1	RFX	
YOUR SELL INTENTIONS (Add a Security)					Liquidity Cloud		
Instrument	Direction	Size	Price/Spread	Score	RFX		
PEG 3.600 12/01/2047 74456QBT2	Buy	5m	+73	5	9	RFX	
OC 9.000 06/15/2019 690742AC5	Buy	0-1m	+120 to +130	3	5	RFX	
APL 2.900 09/12/2027 037833OB3	Buy	8-10m	+55	6	8	RFX	
GE 5.000 01/20/2066 389604BQ5	Buy	10m	+45	7	7	RFX	
VOYA 4.700 01/23/2048 929089AE0	Buy	6-10m	+140	5	4	RFX	
MSFT 3.300 02/06/2027 594918BY9	Buy	11m	+66	6	9	RFX	
RJF 4.950 07/15/2046 75473DAF6	Buy	2.8m	+84	4	7	RFX	
PRU 5.100 08/15/2043 74432QBY0	Buy	5+ m	+91	2	4	RFX	
OXY 4.200 03/15/2048 674688CN3	Buy	6.5M	+123	3	6	RFX	

FIG. 7

YOUR SELL INTENTIONS					YOUR BUY INTENTIONS											
Add a Security					Add a Security											
Instrument	Direction	Size	Price/Spread	Liquidity Cloud Score	RFX	Instrument	Direction	Size	Price/Spread	Liquidity Cloud Score	RFX					
VZ 8.000 06/01/2022 645767AY0	Sell	25m	+93	6	RFX	PEG 3.600 12/01/2047 74456QBT2	Buy	5m	+73	5	RFX					
BBBY 4.915 08/01/2034 075866AB6	Sell	1-5m	+80 to +85	4	RFX	OC 9.000 06/15/2019 690742AC5	Buy	0-1m	+120 to +130	3	RFX					
GPS 5.950 04/12/2021 38476DAK4	Sell	5m	+90 to +100			ADL 2.000 00/12/2027		8-10m	+55	6	RFX					
IP 7.300 11/15/2039 460146CF8	Sell	5m	+120 to +13-			LTX Liquidity Cloud Score Update X CAT 2.400 06/06/2022 BUY Intention Update 14913QAA7 Previous: 4 New: 7 RFX						10m	+45	7	RFX	
MARK 2750 02/10/2025 68933YAR5	Sell	5-10m	+70 to +80									6-10m	+140	5	RFX	
CVX 1.961 03/03/2020 166764AR1	Sell	10m	+35 to +40									11m	+66	6	RFX	
WMT 4.000 04/11/2043 931142DG5	Sell	12m	+65 to +75	8	RFX						RJF 4.950 07/15/2046 75473DAF6	Buy	2.8m	+84	4	RFX
CAT 2.400 06/06/2022 14913QAA7	Sell	4.5m	+30	3	RFX						PRU5.100 08/15/2043 74432QBY0	Buy	5+ m	+91	2	RFX
ALL 5.750 08/15/2053 020002BB6	Sell	10-15M	+25 to +30	4	RFX	OXY 4.200 03/15/2048 674688CN3	Buy	6.5M	+123	3	RFX					
DE 3.900 06/09/2042 244199BF1	Sell	15m	+55 to +65	4	RFX											

FIG. 8

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BUYSIDE VIEW					
RFX Ticket					✕
VZ 8.000 6/1/2022 64576AY0				5Y UST 2.75 4/2023 Outright	
Direction SELL ▼	Qty (000) 25,000 ⬆ ⬇	Committed Level (bps) +93 ⬆ ⬇	Time 20 Mins ▼		
		25,000,000	Est px. 123.45		
Fill Type Partial ▼	Min Fill (000) 250 ◇	Buy Now Spread (bps) +90 ◇	Stack Locked Locked ▼		
		25,000,000	Est px. 123.45		
Jefferies	DEALER	X DEALER Y Z	MUFG	RAYMOND JAMES	DEALERA B C
					DEALER 123 >
^ More Parameters					
Transaction Type RFX ▼	Pricing Protocol Spread ▼	Settlement Date T+2 ▼	Transaction Fee (bps) 1.0 ▼		
Cloud Matches On Off	Max # of Invites 25	Benchmark 5Y UST 2.75 4/2023 912828EY7 ▼			
Spot Time Immediate ▼	Spot Time Auto ▼	Outright Cross			
Comment					
Comments do not affect trade terms					
Save			Send RFX		

FIG. 9

RFX DEALER VIEW

XDEALER
Y Z

Activity Monitor

YOUR HOSTED RFX

Status	Client	Side	Size (000)	Security	Committed	Trade Now	Trans Fee	Custs	Stack Fill%	Stack Lvl	Fill Amount	Time	Actions
Req	GBAM	Sell	25,000	VZ 8.000	06/01/2022	+93	1.0	25	----	----	-----	0:01	Launch Pass
LIVE	FUND1	Sell	17,000	VOYA 4.800	06/15/2046	+169	1.0	21	91%	+169	15,500	00:04:23	
LIVE	AM#1	Sell	20,000	PRU 5.100	08/15/2043	+121	1.0	18	85%	+121	17,000	00:07:04	
LIVE	AM#7	Buy	10,000	GE 5.875	01/14/2038	+177	1.0	28	100%	+179	10,000	00:11:25	
Done	FUND9	Buy	15,000	ALL 5.55	05/09/2035	+112	1.0	20	100%	+115	15,000	12:36:00 PM	
Done	IM123	Sell	12,500	MSFT 5.300	02/08/2041	+83	1.0	16	100%	+82	12,500	12:20:00 PM	

X

GBAM has selected you as RFX Dealer
SELL 25,000,000 VZ 8.000 06/01/2022

Committed
+93

Trade Now
+90

Trans Fee
1.0

Custs
25

[PASS](#)

[Launch](#)

[View Details](#)

FIG. 10

AUTO BID

RFX Stack

20:00

X

DEALER

Y

Z

VZ 8.000 06/01/2022

64576AY0 Settlement Date: T+2

5Y UST 2.75 4/2023

Set Spread Parameters

Qty

\$25,000,000

Min Fill: \$250,000

Committed Level

+92bps

Buy Now Spread

+89bps

Buy Now

You Bid

Auto Bid

Qty (000)

Spread (bps)

Fill Type

Clear

Submit Bid

FIG. 11

SELLER			DEALER			BIDDER																																																																
RFX Stack X DEALER Y Z VZ 8.000.06/01/2022 5Y UST 2.75 4/2023 <u>Set Spread Parameters</u> 64576AY0 Settlement Date: T+2 Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000			RFX Stack X DEALER Y Z VZ 8.000.06/01/2022 5Y UST 2.75 4/2023 <u>Set Spread Parameters</u> 64576AY0 Settlement Date: T+2 Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000			RFX Stack X DEALER Y Z VZ 8.000.06/01/2022 5Y UST 2.75 4/2023 <u>Set Spread Parameters</u> 64576AY0 Settlement Date: T+2 Qty Committed Level Buy Now Spread \$25,000,000 +92bps +88bps Min Fill: \$250,000																																																																
						You Bid Auto Bid Qty (000) Spread (bps) Fill Type 12,000 +92 PARTIAL \$12,000,000 Est Px 123.45 No Min Fill Clear Submit Bid																																																																
Summary <table><thead><tr><th>Avg Spread</th><th>Total QTY</th><th>Alloc QTY</th><th>Alloc Rate</th><th># Bidders</th></tr></thead><tbody><tr><td>+93</td><td>13,000</td><td>13,000</td><td>52%</td><td>2</td></tr></tbody></table> <table><thead><tr><th>Status</th><th>Bid</th><th>Qty (000)</th><th>Alloc (000)</th><th>Alloc Rate</th><th>Bidder</th><th>Time</th></tr></thead><tbody><tr><td>> Alloc</td><td>+93</td><td>7,000</td><td>7,000</td><td>100%</td><td>Customer K</td><td>10:07:00</td></tr><tr><td>Alloc</td><td>+93</td><td>6,000</td><td>6,000</td><td>100%</td><td>Customer L</td><td>10:08:00</td></tr></tbody></table>			Avg Spread	Total QTY	Alloc QTY	Alloc Rate	# Bidders	+93	13,000	13,000	52%	2	Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time	> Alloc	+93	7,000	7,000	100%	Customer K	10:07:00	Alloc	+93	6,000	6,000	100%	Customer L	10:08:00	Summary <table><thead><tr><th>Avg Spread</th><th>Total QTY</th><th>Alloc QTY</th><th>Alloc Rate</th><th># Bidders</th></tr></thead><tbody><tr><td>+93</td><td>13,000</td><td>13,000</td><td>52%</td><td>2</td></tr></tbody></table> <table><thead><tr><th>Status</th><th>Bid</th><th>Qty (000)</th><th>Alloc (000)</th><th>Alloc Rate</th><th>Bidder</th><th>Time</th></tr></thead><tbody><tr><td>> Alloc</td><td>+93</td><td>7,000</td><td>7,000</td><td>100%</td><td>Customer K</td><td>10:07:00</td></tr><tr><td>Alloc</td><td>+93</td><td>6,000</td><td>6,000</td><td>100%</td><td>Customer L</td><td>10:08:00</td></tr></tbody></table>			Avg Spread	Total QTY	Alloc QTY	Alloc Rate	# Bidders	+93	13,000	13,000	52%	2	Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time	> Alloc	+93	7,000	7,000	100%	Customer K	10:07:00	Alloc	+93	6,000	6,000	100%	Customer L	10:08:00	Enter a Bid to see the Stack		
Avg Spread	Total QTY	Alloc QTY	Alloc Rate	# Bidders																																																																		
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Alloc	+93	6,000	6,000	100%	Customer L	10:08:00																																																																

FIG. 12

SELLER										DEALER										BIDDER																																																																																																																																																									
RFx Stack × 14:00 14:00 ☒ DEALER Y Z VZ 8.000 06/01/2022 5Y UST 2.75 4/2023 64576AV0 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000																														RFx Stack × 14:00 14:00 ☒ DEALER Y Z VZ 8.000 06/01/2022 5Y UST 2.75 4/2023 64576AV0 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000																														RFx Stack × 14:00 14:00 ☒ DEALER Y Z VZ 8.000 06/01/2022 5Y UST 2.75 4/2023 64576AV0 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +92bps +89bps Min Fill: \$250,000																																																																																																																	
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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Status</th> <th>Bid</th> <th>Qty (000)</th> <th>Alloc (000)</th> <th>Alloc Rate</th> <th>Bidder</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>> Alloc</td> <td>+92</td> <td>12,000</td> <td>12,000</td> <td>100%</td> <td>Your Bid</td> <td>10:09:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>7,000</td> <td>7,000</td> <td>100%</td> <td>Bidder 2</td> <td>10:07:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>6,000</td> <td>6,000</td> <td>100%</td> <td>Bidder 3</td> <td>10:08:00</td> </tr> </tbody> </table>																														Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time	> Alloc	+92	12,000	12,000	100%	Your Bid	10:09:00	Alloc	+92	7,000	7,000	100%	Bidder 2	10:07:00	Alloc	+92	6,000	6,000	100%	Bidder 3	10:08:00	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Status</th> <th>Bid</th> <th>Qty (000)</th> <th>Alloc (000)</th> <th>Alloc Rate</th> <th>Bidder</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>> Alloc</td> <td>+92</td> <td>12,000</td> <td>12,000</td> <td>100%</td> <td>Your Bid</td> <td>10:09:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>7,000</td> <td>7,000</td> <td>100%</td> <td>Bidder 2</td> <td>10:07:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>6,000</td> <td>6,000</td> <td>100%</td> <td>Bidder 3</td> <td>10:08:00</td> </tr> </tbody> </table>																														Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time	> Alloc	+92	12,000	12,000	100%	Your Bid	10:09:00	Alloc	+92	7,000	7,000	100%	Bidder 2	10:07:00	Alloc	+92	6,000	6,000	100%	Bidder 3	10:08:00	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Status</th> <th>Bid</th> <th>Qty (000)</th> <th>Alloc (000)</th> <th>Alloc Rate</th> <th>Bidder</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>> Alloc</td> <td>+92</td> <td>12,000</td> <td>12,000</td> <td>100%</td> <td>Your Bid</td> <td>10:09:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>7,000</td> <td>7,000</td> <td>100%</td> <td>Bidder 2</td> <td>10:07:00</td> </tr> <tr> <td>Alloc</td> <td>+92</td> <td>6,000</td> <td>6,000</td> <td>100%</td> <td>Bidder 3</td> <td>10:08:00</td> </tr> </tbody> </table>																														Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time	> Alloc	+92	12,000	12,000	100%	Your Bid	10:09:00	Alloc	+92	7,000	7,000	100%	Bidder 2	10:07:00	Alloc	+92	6,000	6,000	100%	Bidder 3	10:08:00
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Alloc	+92	6,000	6,000	100%	Bidder 3	10:08:00																																																																																																																																																																							

FIG. 13

SELLER		DEALER		BIDDER	
RFX Stack ☒ X VZ 8,000,000/1/2022 5Y UST 2.75 4/2023 64576A10 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000		RFX Stack ☒ X VZ 8,000,000/1/2022 5Y UST 2.75 4/2023 64576A10 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +93bps +90bps Min Fill: \$250,000		RFX Stack ☒ X VZ 8,000,000/1/2022 5Y UST 2.75 4/2023 64576A10 Settlement Date: T+2 Set Spread Parameters Qty Committed Level Buy Now Spread \$25,000,000 +92bps +89bps Min Fill: \$250,000	
Summary Avg Spread +92 Total QTY 50,000 Alloc QTY 25,000 Alloc Rate 100% # Bidders 7 Status Bid Qty (000) Alloc (000) Alloc Rate Bidder Time > Alloc +92 10,000 10,000 100% Bidder 6 10:20:00 Alloc +92 8,000 8,000 100% Bidder 5 10:19:00 Alloc +92 6,000 6,000 100% Bidder 3 10:18:10 Partial +92 2,000 1,000 50% Bidder 7 10:18:00 No Alloc +92.5 5,000 0 0% Bidder 4 10:10:00 No Alloc +93 12,000 0 0% Bidder 1 10:05:00 No Alloc +93 7,000 0 0% Bidder 2 10:07:00 Improved +92.5 10,000 0 0% Bidder 6 10:15:00 Improved +92.5 8,000 0 0% Bidder 5 10:12:00 Improved +92.5 6,000 0 0% Bidder 3 10:17:00 Improved +93 6,000 0 0% Bidder 3 10:08:00		Summary Avg Spread +92 Total QTY 50,000 Alloc QTY 25,000 Alloc Rate 100% # Bidders 7 Status Bid Qty (000) Alloc (000) Alloc Rate Bidder Time > Alloc +92 10,000 10,000 100% Customer Q 10:20:00 Alloc +92 8,000 8,000 100% Anonymous 10:19:00 Alloc +92 6,000 6,000 100% Customer L 10:18:10 Partial +92 2,000 1,000 50% Customer V 10:18:00 No Alloc +92.5 5,000 0 0% Customer F 10:10:00 No Alloc +93 12,000 0 0% Customer C 10:05:00 No Alloc +93 7,000 0 0% Customer K 10:07:00 Improved +92.5 10,000 0 0% Customer Q 10:15:00 Improved +92.5 8,000 0 0% Anonymous 10:12:00 Improved +92.5 6,000 0 0% Customer L 10:17:00 Improved +93 6,000 0 0% Customer L 10:08:00		Summary Avg Spread +91 Total QTY 50,000 Alloc QTY 25,000 Alloc Rate 100% # Bidders 7 Status Bid Qty (000) Alloc (000) Alloc Rate Bidder Time > Alloc +91 10,000 10,000 100% Bidder 6 10:20:00 Alloc +91 8,000 8,000 100% Bidder 5 10:19:00 Alloc +91 6,000 6,000 100% Bidder 3 10:18:10 Partial +91 2,000 1,000 50% Bidder 7 10:18:00 No Alloc +91.5 5,000 0 0% Bidder 4 10:10:00 > No Alloc +92 12,000 0 0% Your Bid 10:05:00 No Alloc +92 7,000 0 0% Bidder 2 10:07:00 Improved +91.5 10,000 0 0% Bidder 6 10:15:00 Improved +91.5 8,000 0 0% Bidder 5 10:12:00 Improved +91.5 6,000 0 0% Bidder 3 10:17:00 Improved +92 6,000 0 0% Bidder 3 10:08:00	

FIG. 14

SELLER

RFX Stack

X

DEALER

Y

Z

VZ 8,000,060/1/2022

5Y UST 2.75 4/2023

Set Spread Parameters

Qty

\$25,000,000

Committed Level

+93bps

Buy Now Spread

+90bps

Min Fill: \$250,000

Summary

Avg Spread

+92

Total QTY

50,000

Alloc QTY

25,000

Alloc Rate

100%

Bidders

7

Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time
Alloc	+92	10,000	10,000	100%	Bidder 6	10:20:00
Alloc	+92	8,000	8,000	100%	Bidder 5	10:19:00
Alloc	+92	6,000	6,000	100%	Bidder 3	10:18:10
Partial	+92	2,000	1,000	50%	Bidder 7	10:18:00
No Alloc	+92.5	5,000	0	0%	Bidder 4	10:10:00
No Alloc	+93	12,000	0	0%	Bidder 1	10:05:00
No Alloc	+93	7,000	0	0%	Bidder 2	10:07:00
Improved	+92.5	10,000	0	0%	Bidder 6	10:15:00
Improved	+92.5	8,000	0	0%	Bidder 5	10:12:00
Improved	+92.5	6,000	0	0%	Bidder 3	10:17:00
Improved	+93	6,000	0	0%	Bidder 3	10:08:00

DEALER

RFX Stack

X

DEALER

Y

Z

VZ 8,000,060/1/2022

5Y UST 2.75 4/2023

Set Spread Parameters

Qty

\$25,000,000

Committed Level

+93bps

Buy Now Spread

+90bps

Min Fill: \$250,000

Summary

Avg Spread

+92

Total QTY

50,000

Alloc QTY

25,000

Alloc Rate

100%

Bidders

7

Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time
Alloc	+92	10,000	10,000	100%	Customer Q	10:20:00
Alloc	+92	8,000	8,000	100%	Anonymous	10:19:00
Alloc	+92	6,000	6,000	100%	Customer L	10:18:10
Partial	+92	2,000	1,000	50%	Customer V	10:18:00
No Alloc	+92.5	5,000	0	0%	Customer F	10:10:00
No Alloc	+93	12,000	0	0%	Customer C	10:05:00
No Alloc	+93	7,000	0	0%	Customer K	10:07:00
Improved	+92.5	10,000	0	0%	Customer Q	10:15:00
Improved	+92.5	8,000	0	0%	Anonymous	10:12:00
Improved	+92.5	6,000	0	0%	Customer L	10:17:00
Improved	+93	6,000	0	0%	Customer L	10:08:00

BIDDER

RFX Stack

X

DEALER

Y

Z

VZ 8,000,060/1/2022

5Y UST 2.75 4/2023

Set Spread Parameters

Qty

\$25,000,000

Committed Level

+92bps

Buy Now Spread

+89bps

Min Fill: \$250,000

Summary

Avg Spread

+91

Total QTY

50,000

Alloc QTY

25,000

Alloc Rate

100%

Bidders

7

Status	Bid	Qty (000)	Alloc (000)	Alloc Rate	Bidder	Time
Alloc	+91	10,000	10,000	100%	Bidder 6	10:20:00
Alloc	+91	8,000	8,000	100%	Bidder 5	10:19:00
Alloc	+91	6,000	6,000	100%	Bidder 3	10:18:10
Partial	+91	2,000	1,000	50%	Bidder 7	10:18:00
No Alloc	+91.5	5,000	0	0%	Bidder 4	10:10:00
> No Alloc	+92	12,000	0	0%	Your Bid	10:05:00
No Alloc	+92	7,000	0	0%	Bidder 2	10:07:00
Improved	+91.5	10,000	0	0%	Bidder 0	10:15:00
Improved	+91.5	8,000	0	0%	Bidder 5	10:12:00
Improved	+91.5	6,000	0	0%	Bidder 3	10:17:00
Improved	+92	6,000	0	0%	Bidder 3	10:08:00

Clear

Update Bid

Qty (000)

12,000

Spread (bps)

+90.5

Fill Type

PARTIAL

Est Px 123.45

No Min Fill

FIG. 15

FIG. 16

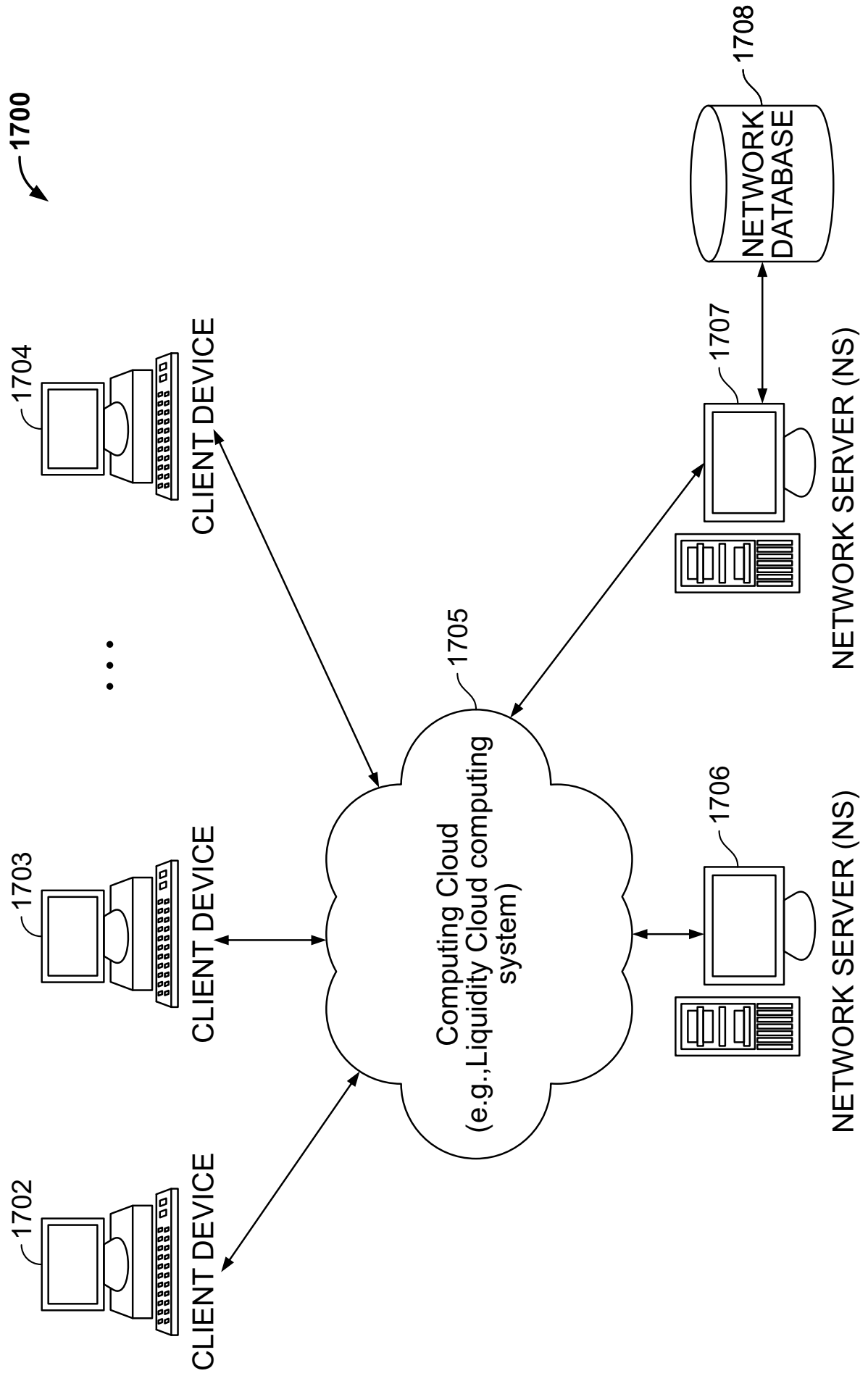


FIG. 17

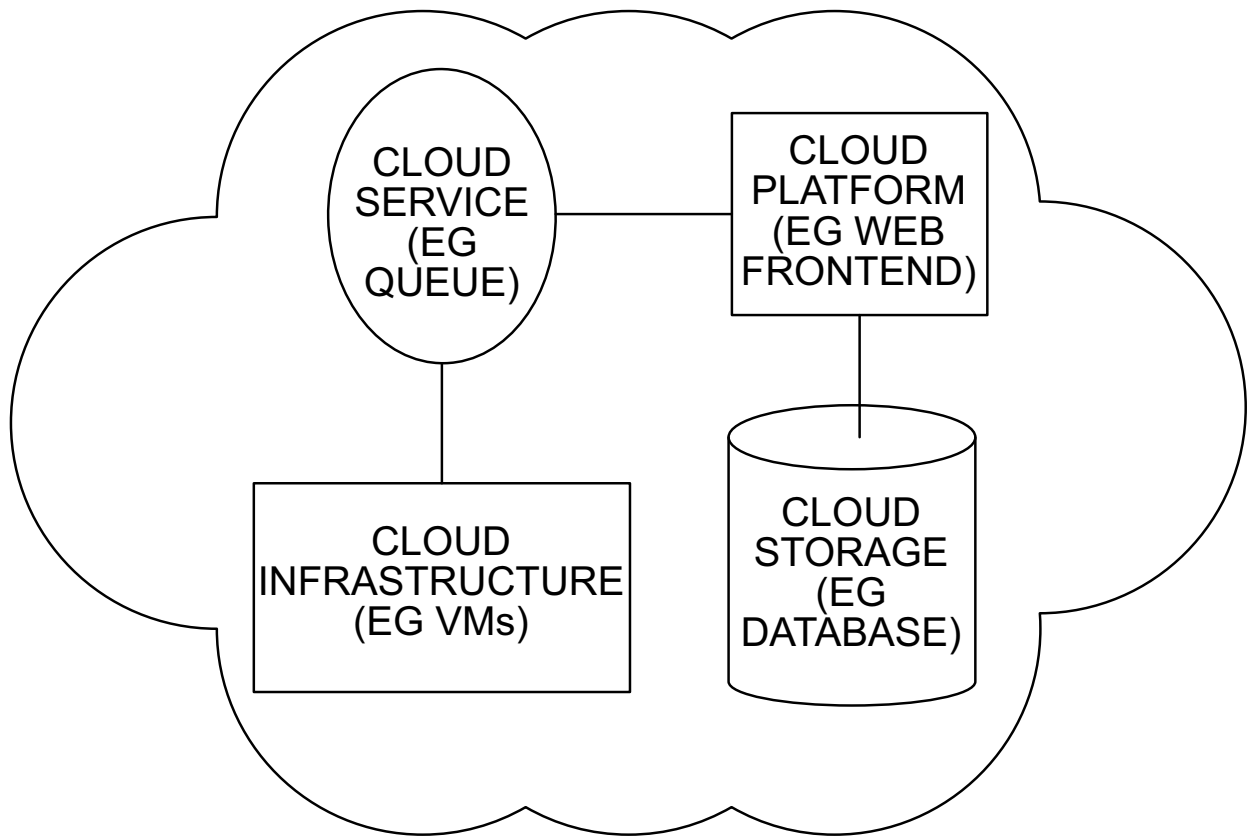


FIG. 18

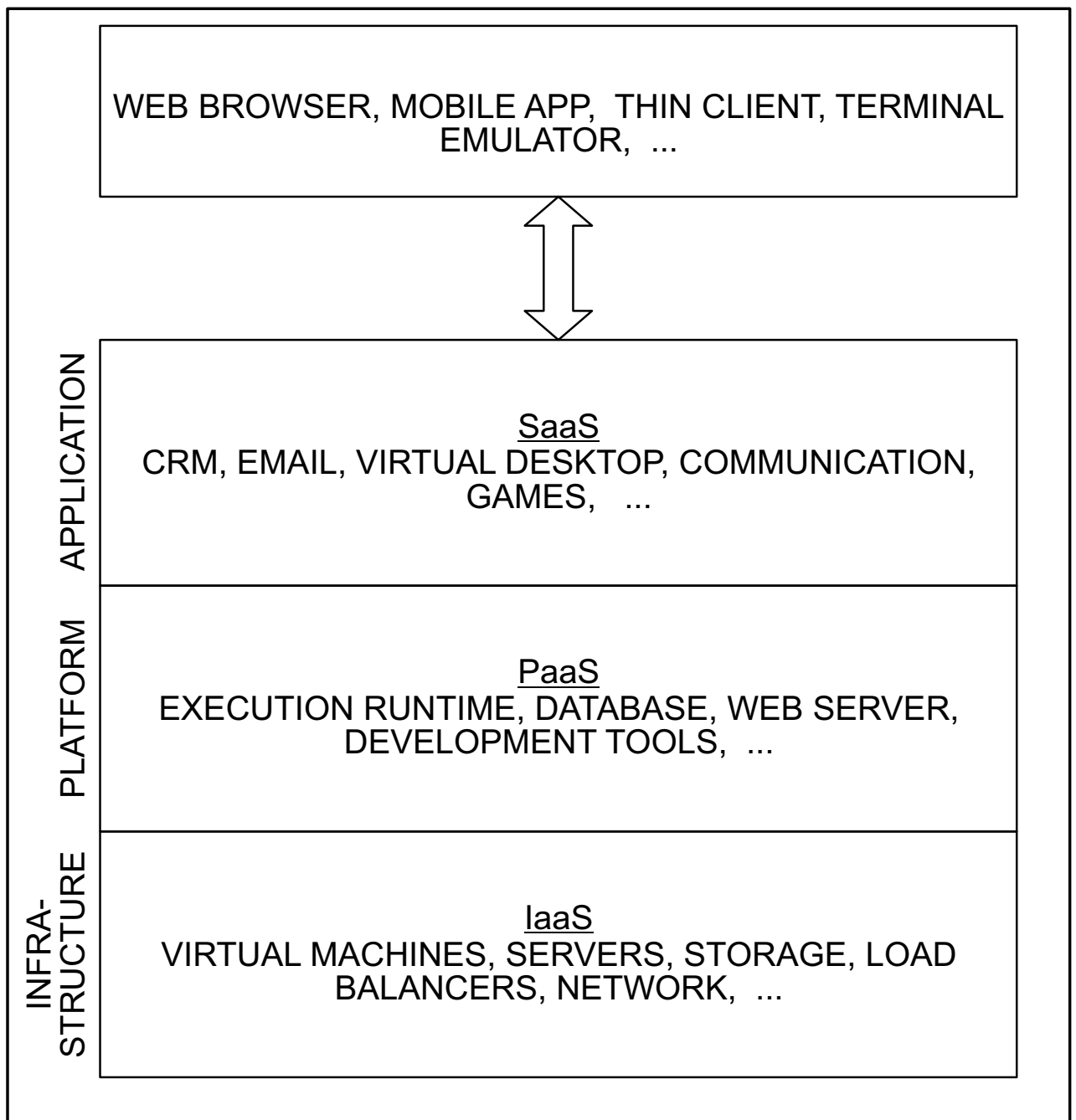


FIG. 19