

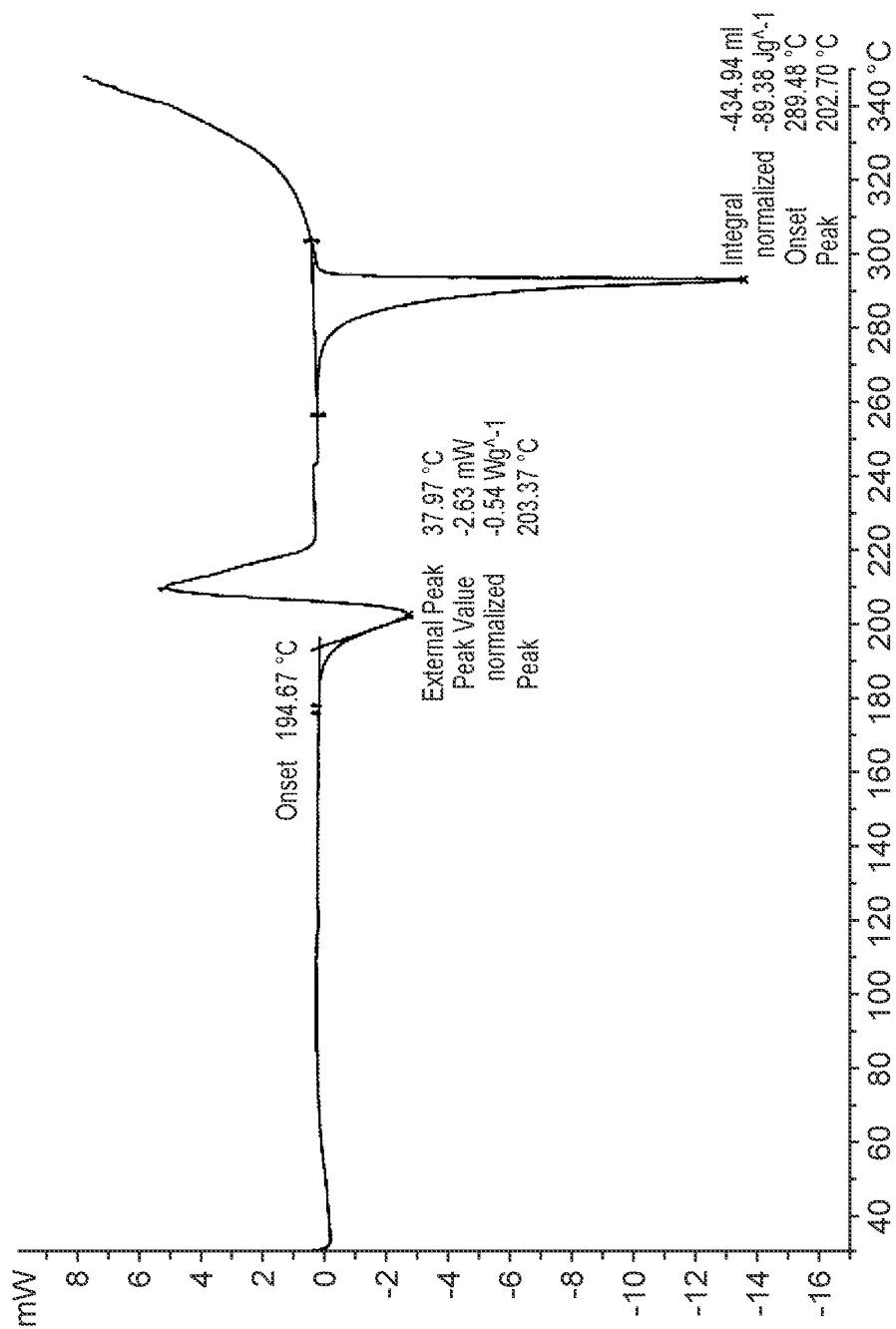


FIG. 2

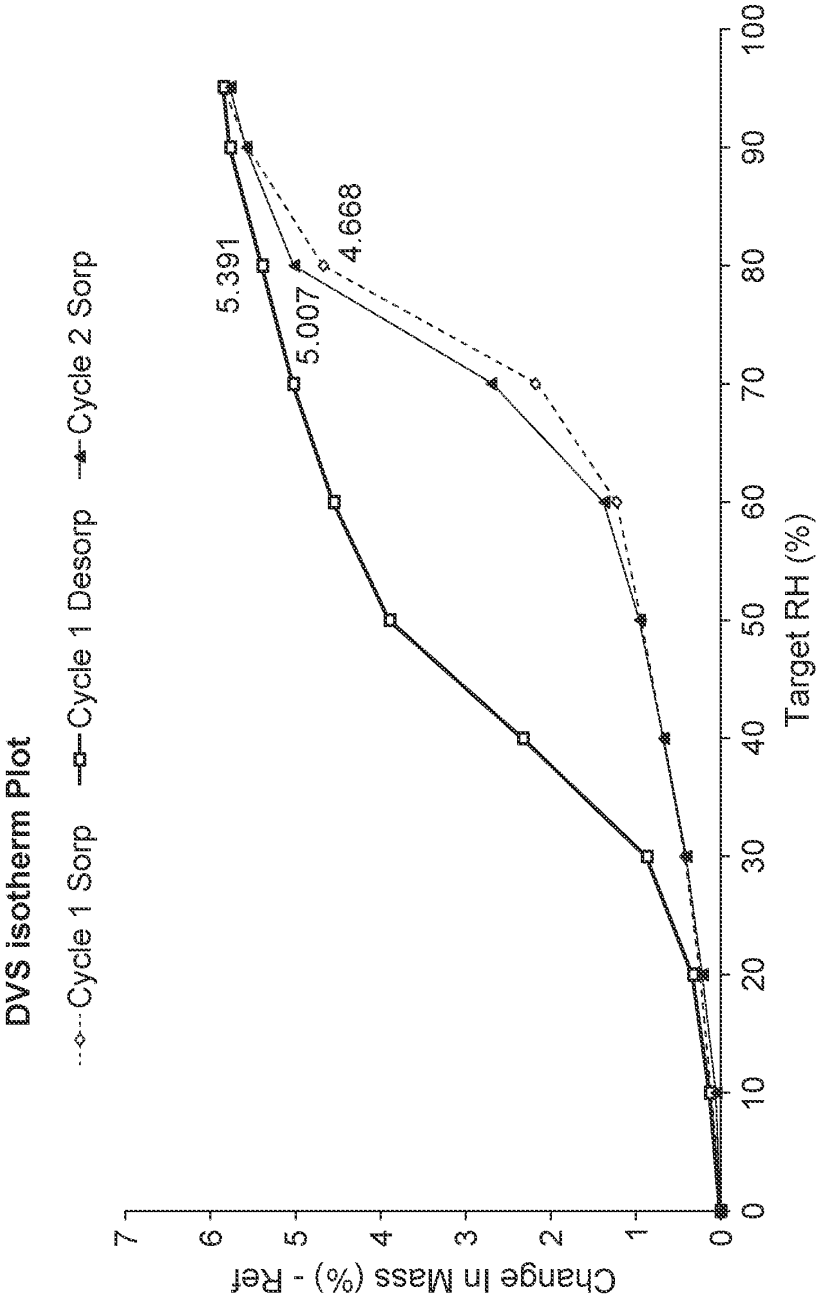


FIG. 3A

Start Position [$^{\circ}2\theta$.]	3.0100
End Position [$^{\circ}\theta$.]	45.0100
Step Size [$^{\circ}\theta$.]	0.0200
Scan Step Time [s]	10.1600
Scan Type	Continuous
Divergence Slit Type	Fixed
Divergence Slit Size [$^{\circ}$]	1.0000
Anode Material	Cu
Generator Settings	40 mA. 45 kV
Spinning	Yes

Powder Pattern:

Counts

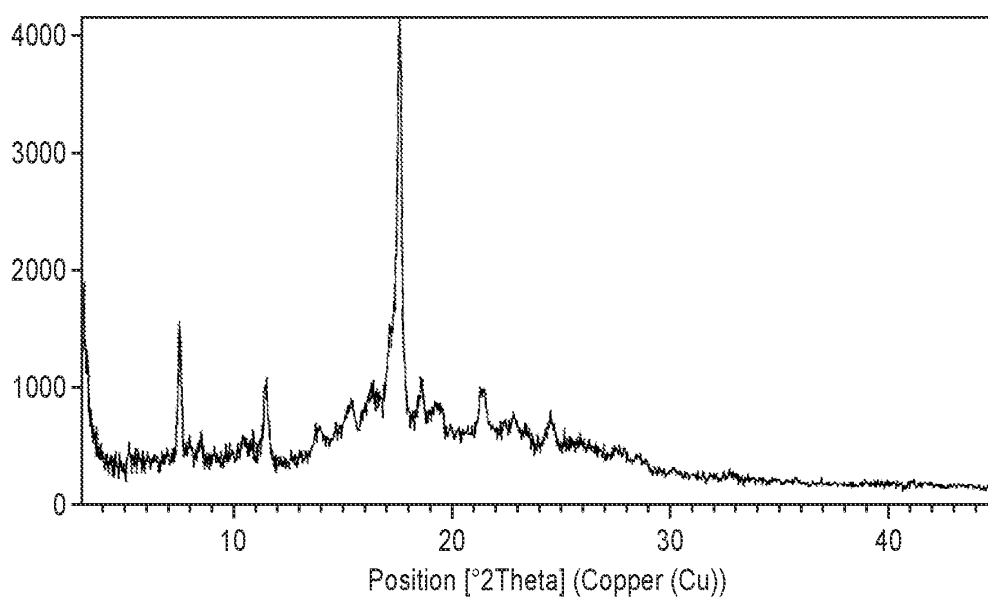


FIG. 3B

Pos. [°2Th.]	Height. [cts]	FWHM [°2Th.]	d-spacing [Å]	Pos. [°2Th.]	Tip width [°2Th.]
3.1709	1201.95	0.0787	27.86388	30.15	0.0945
4.5720	213.33	0.0394	19.32751	5.35	0.0472
4.6735	278.69	0.0590	18.90811	6.99	0.0708
4.8843	169.69	0.0787	18.09245	4.26	0.0945
5.3055	358.60	0.0787	16.65717	9.00	0.0945
5.6096	313.04	0.0394	15.75483	7.85	0.0472
5.9629	252.25	0.0590	14.82218	6.33	0.0708
6.1718	235.43	0.0787	14.32084	5.91	0.0945
7.0636	313.43	0.0984	12.51461	7.86	0.1181
7.6348	1411.40	0.0984	11.57965	35.41	0.1181
8.0591	419.77	0.0590	10.97093	10.53	0.0708
8.5949	452.14	0.0590	10.28813	11.34	0.0708
9.1518	327.87	0.0590	9.66329	8.22	0.0708
9.8125	260.50	0.1574	9.01415	6.53	0.1889
10.1874	348.01	0.0590	8.68325	8.73	0.0708
10.3886	415.88	0.1181	8.51553	10.43	0.1417
10.8136	375.06	0.1181	8.18172	9.41	0.1417
11.3769	829.34	0.0590	7.77791	20.80	0.0708
11.5017	855.56	0.0590	7.69375	21.46	0.0708
12.9499	260.60	0.0590	6.83645	6.54	0.0708
13.0784	294.85	0.0590	6.76956	7.40	0.0708
13.2726	271.04	0.0787	6.67095	6.80	0.0945
13.7106	493.55	0.1181	6.45879	12.38	0.1417
14.6517	537.42	0.0394	6.04600	13.48	0.0472
15.3808	690.61	0.1968	5.76101	17.32	0.2362
16.2277	794.79	0.2362	5.46221	19.94	0.2834
17.0484	1284.10	0.1181	5.20106	32.21	0.1417
17.5612	3986.33	0.1574	5.05031	100.00	0.1889
18.5067	919.60	0.0590	4.79437	23.07	0.0708
19.4654	638.66	0.1181	4.56035	16.02	0.1417
21.2230	779.38	0.0590	4.19649	19.55	0.0708
21.4057	816.51	0.1181	4.15118	20.48	0.1417
22.3660	536.91	0.0787	3.97507	13.47	0.0945
22.7613	608.02	0.1181	3.90692	15.25	0.1417
23.3553	466.07	0.2362	3.80887	11.69	0.2834
24.5115	559.92	0.1968	3.63177	14.05	0.2362
25.1231	489.43	0.0590	3.54473	12.28	0.0708
27.8586	305.95	0.1181	3.20257	7.67	0.1417
28.6722	222.62	0.4723	3.11352	5.58	0.5668
30.1276	131.85	0.3149	2.96635	3.31	0.3779
31.5251	111.50	0.0787	2.83796	2.80	0.0945
32.8617	84.31	0.2362	2.72553	2.11	0.2834
34.8079	49.99	0.2362	2.57747	1.25	0.2834
35.6919	44.90	0.4723	2.51563	1.13	0.5668
36.8486	59.84	0.0590	2.43928	1.50	0.0708
41.0595	34.71	0.1440	2.19650	0.87	0.1728

FIG. 3C

Start Position [$^{\circ}2\theta$]	3.0100
End Position [$^{\circ}2\theta$]	45.0100
Step Size [$^{\circ}2\theta$]	0.0200
Scan Step Time [s]	10.1600
Scan Type	Continuous
Divergence Slit Type	Fixed
Divergence Slit Size [$^{\circ}$]	1.0000
Anode Material	Cu
Generator Settings	40 mA, 45 kV
Spinning	Yes

Powder Pattern:

Counts

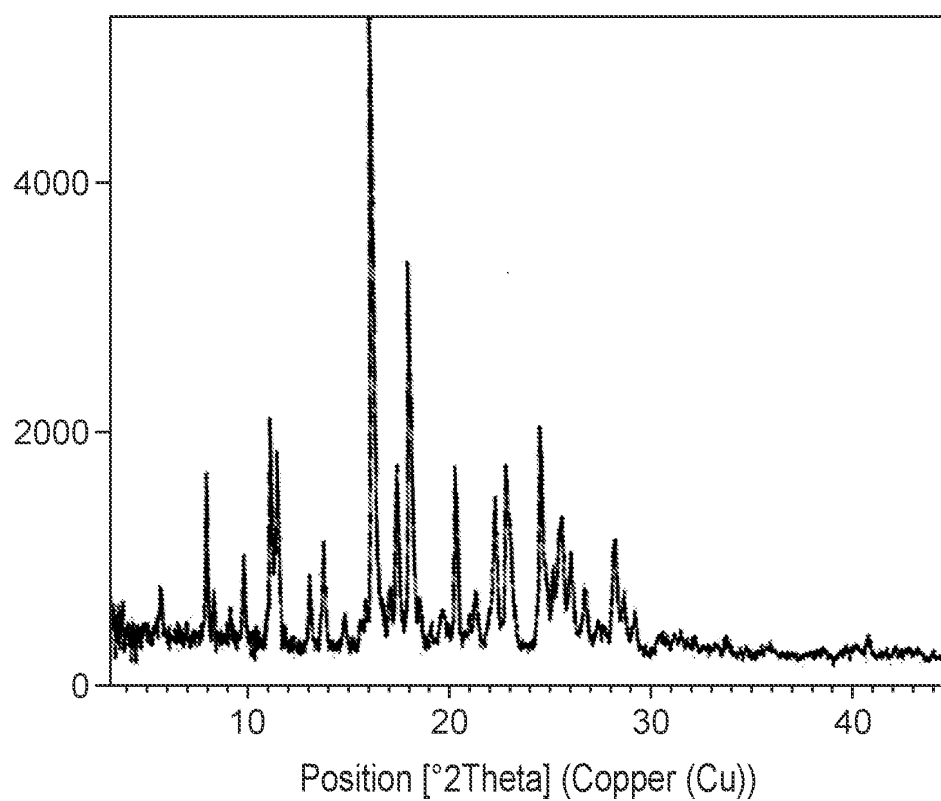
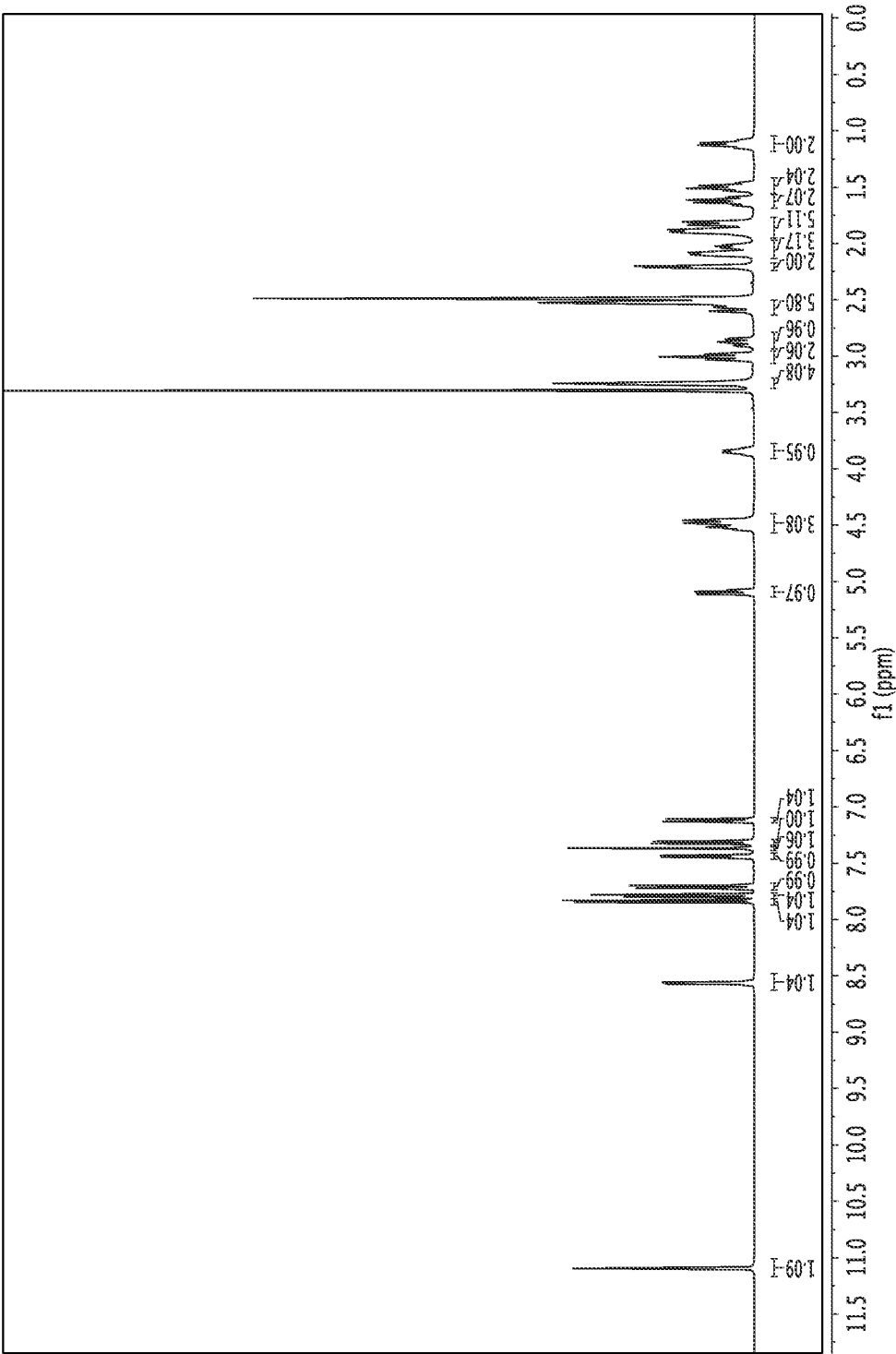
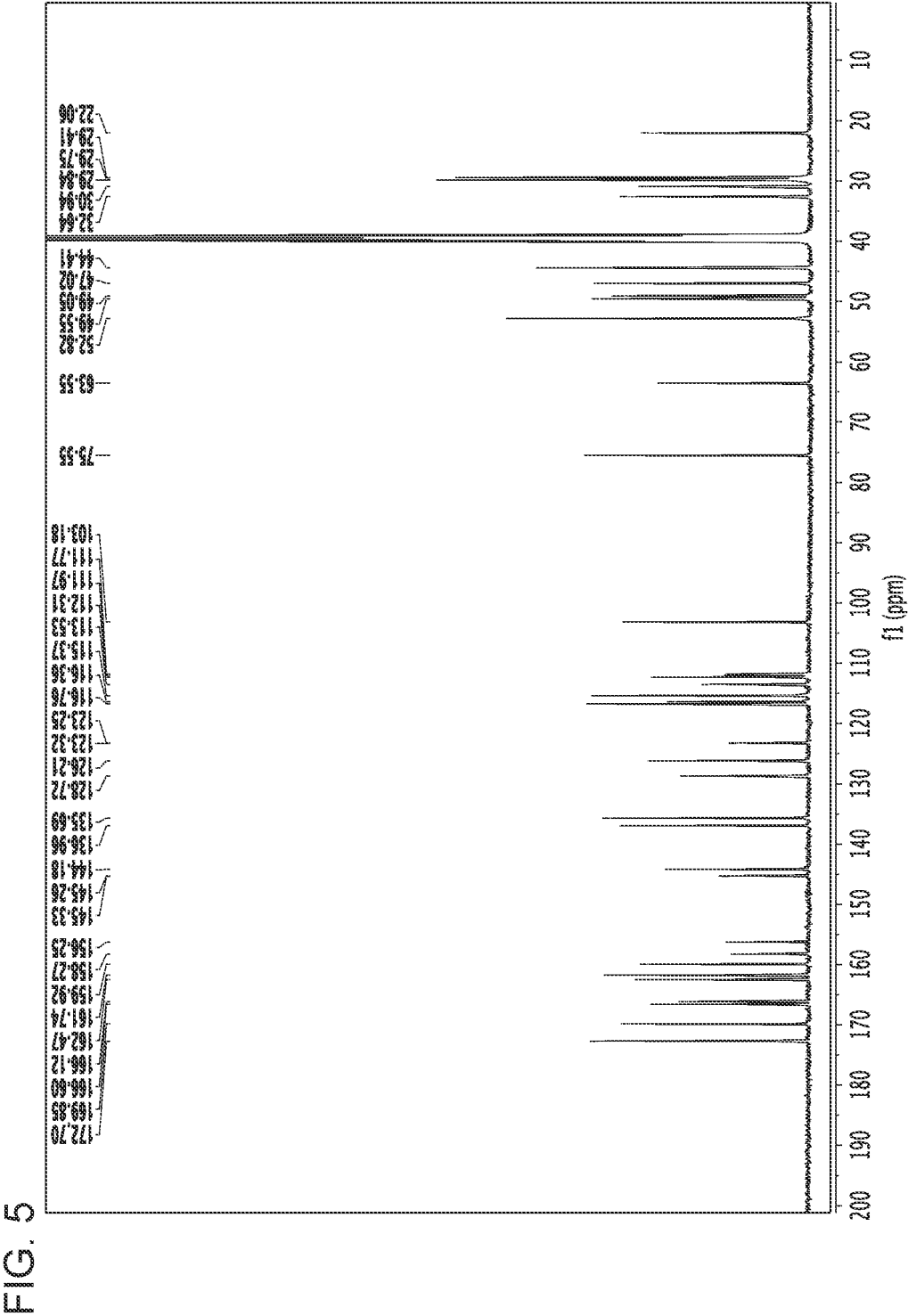


FIG. 3D

Pos. [°2Th.]	Height. [cts]	FWHM [°2Th.]	d-spacing [Å]	Rel. Inc [96]	Tip width [°2Th.]
3.1895	308.19	0.1181	27.70194	6.24	0.1417
3.6257	448.01	0.0394	24.36997	9.08	0.0472
3.9923	103.33	0.0990	22.13301	2.09	0.0708
4.1312	199.88	0.0394	21.38872	4.05	0.0472
5.5347	556.31	0.0787	15.96771	11.27	0.0945
6.4732	239.15	0.0394	13.65483	4.85	0.0472
6.7036	186.26	0.0394	13.18590	3.77	0.0472
6.8438	266.16	0.0787	12.91519	5.39	0.0945
7.5383	213.23	0.0590	11.72772	4.32	0.0708
7.8671	1467.38	0.0984	11.23828	29.73	0.1181
8.2671	547.55	0.1281	10.77790	11.09	0.1417
8.9707	380.59	0.0550	9.85804	7.71	0.0708
9.7063	665.48	0.1181	9.11250	13.48	0.1417
11.0077	1882.92	0.0984	8.03793	38.15	0.1183
11.3491	1489.30	0.0984	7.79690	30.18	0.1181
12.5308	136.66	0.0950	7.06411	2.77	0.0708
12.8614	586.94	0.0984	6.88326	12.10	0.1181
13.5914	912.72	0.0984	6.51517	18.49	0.1181
14.6013	348.93	0.1378	6.06675	7.07	0.1653
14.9112	143.14	0.0590	5.94134	2.90	0.0708
15.3686	269.61	0.1181	5.76555	5.46	0.1417
15.6211	446.17	0.0787	5.67289	9.04	0.0945
16.0925	4935.27	0.1771	5.50778	100.00	0.2125
16.8720	561.88	0.1574	5.25504	11.38	0.1889
17.2061	1505.38	0.1771	5.15374	30.50	0.2125
17.8863	3136.80	0.1574	4.99925	63.56	0.1889
18.3192	392.64	0.1574	4.86301	7.96	0.1889
18.8905	213.30	0.1181	4.70770	4.32	0.1417
19.4066	368.20	0.2362	4.57404	7.06	0.2834
19.6969	231.15	0.0787	4.50729	4.68	0.0945
20.0963	1521.67	0.1378	4.41858	30.83	0.1653
20.7669	326.32	0.0584	4.37739	6.61	0.1181
21.0700	480.91	0.1378	4.21654	9.74	0.1653
22.0929	1257.63	0.1378	4.02359	25.48	0.1653
22.6727	1525.81	0.0787	3.92199	30.92	0.0945
24.3672	1818.75	0.1771	3.65294	36.85	0.2125
24.9493	653.74	0.0584	3.56902	13.25	0.1181
25.4106	1069.72	0.1378	3.50528	21.68	0.1653
25.8665	846.60	0.0787	3.44451	17.15	0.0945
26.5896	533.88	0.1378	3.35247	10.82	0.1653
27.2137	299.12	0.1574	3.27698	5.25	0.1889
27.4773	241.71	0.0787	3.24614	4.90	0.0945
28.0911	786.83	0.1968	3.17659	15.94	0.2362
28.4834	5128.21	0.0550	3.13373	10.70	0.0708
28.9767	317.43	0.0984	3.08149	6.43	0.1181
30.2102	173.54	0.1968	2.95843	3.52	0.2362
30.9687	182.10	0.1574	2.88767	3.69	0.1889
31.2954	182.96	0.1574	2.85827	3.71	0.1889
31.9854	123.57	0.0984	2.79817	2.50	0.1181
33.0727	96.56	0.1968	2.70862	1.56	0.2362
33.4905	115.86	0.2755	2.67578	2.35	0.3306
34.1836	57.16	0.1181	2.62310	1.16	0.1417
34.4866	63.68	0.1181	2.60074	1.29	0.1417
35.6470	82.19	0.3149	2.51869	1.67	0.3779
38.3558	56.57	0.3149	2.34683	1.15	0.3779
39.9862	83.39	0.2362	2.25681	1.69	0.2834
40.6172	155.94	0.1974	2.22123	3.16	0.1889
42.0418	72.19	0.1968	2.14920	1.46	0.2362
43.1832	46.35	0.3840	2.09327	0.94	0.4608
43.9535	40.08	0.1920	2.06347	0.81	0.2304

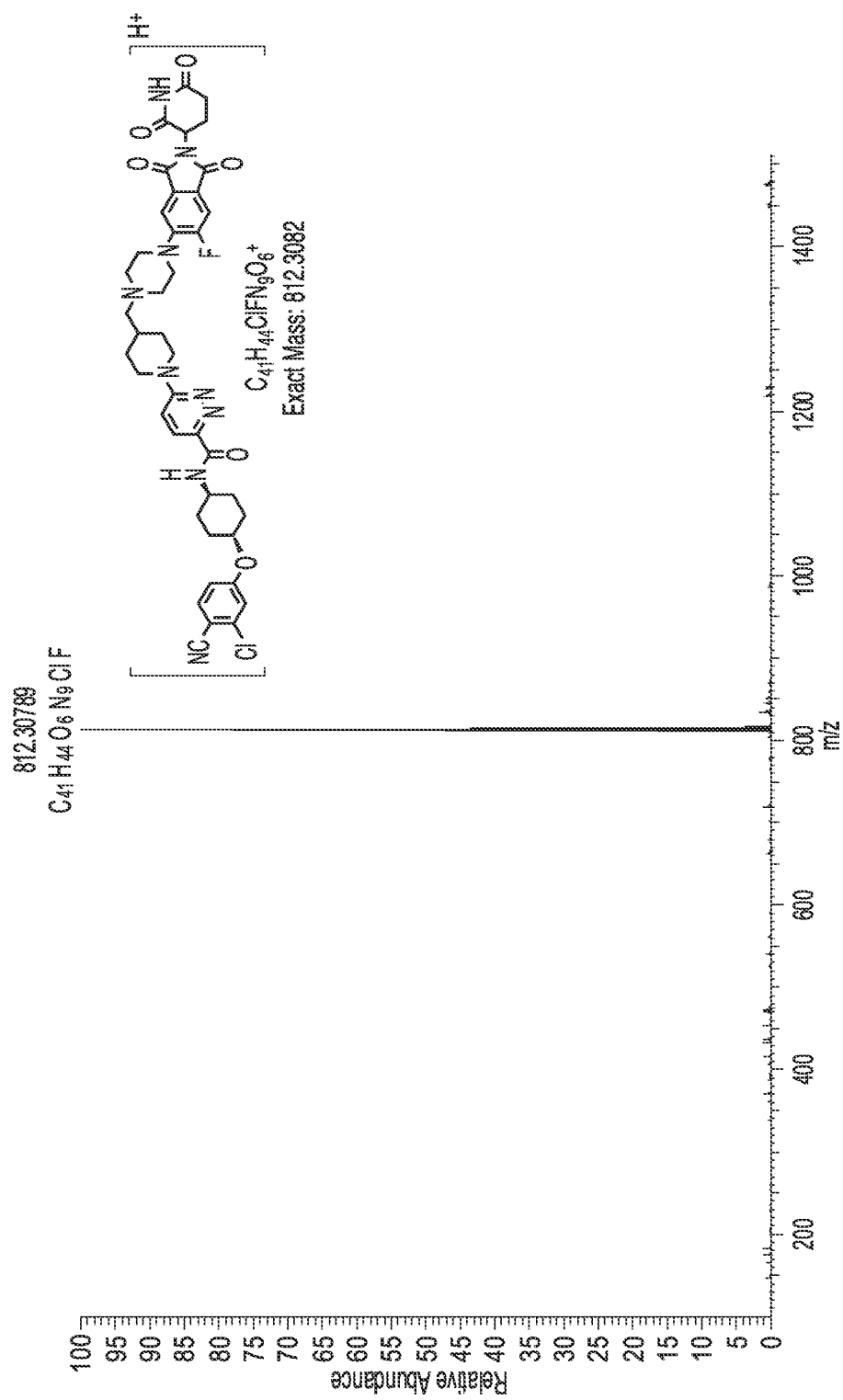
FIG. 4





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FIG. 6



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FIG. 7

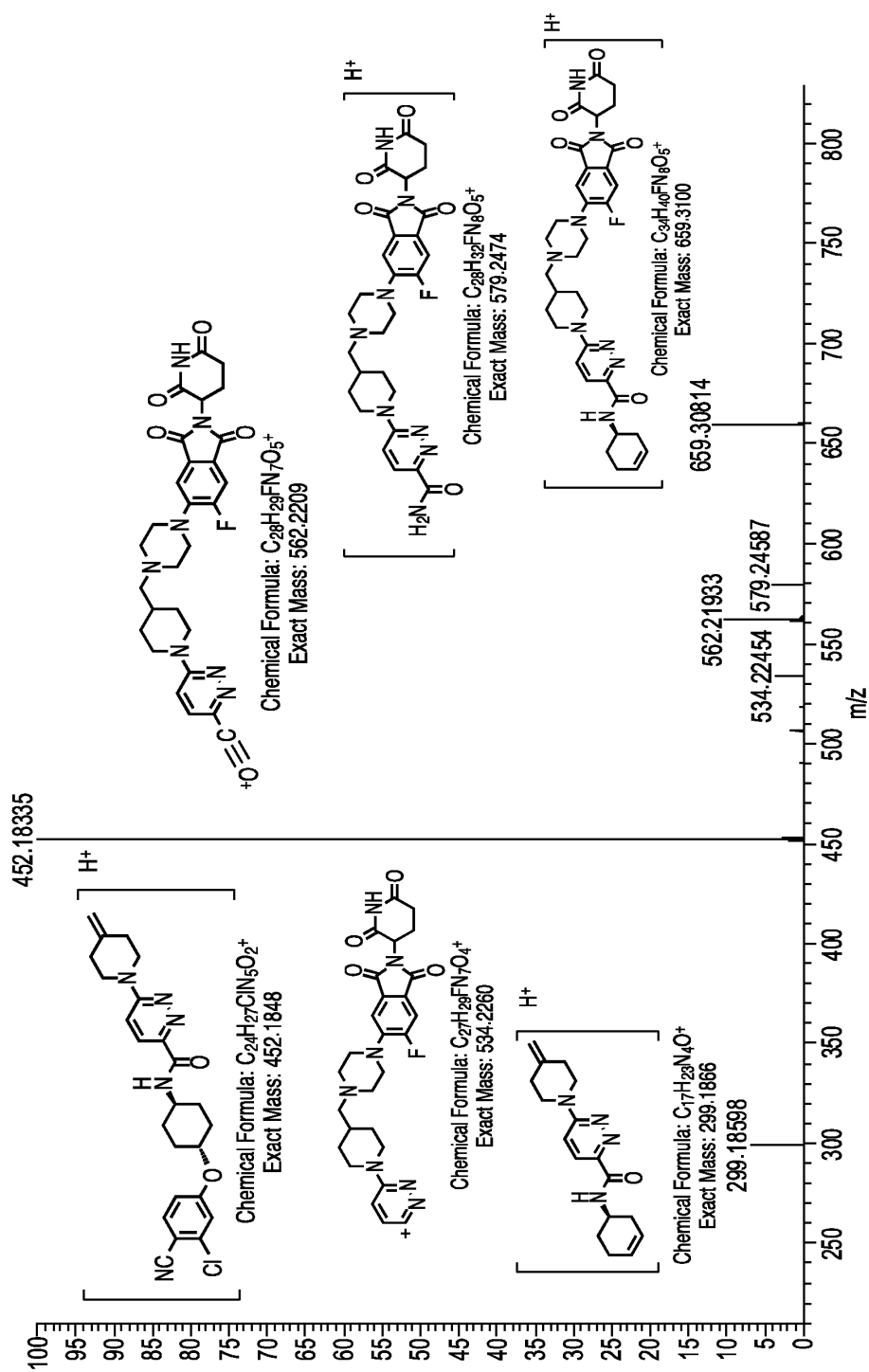
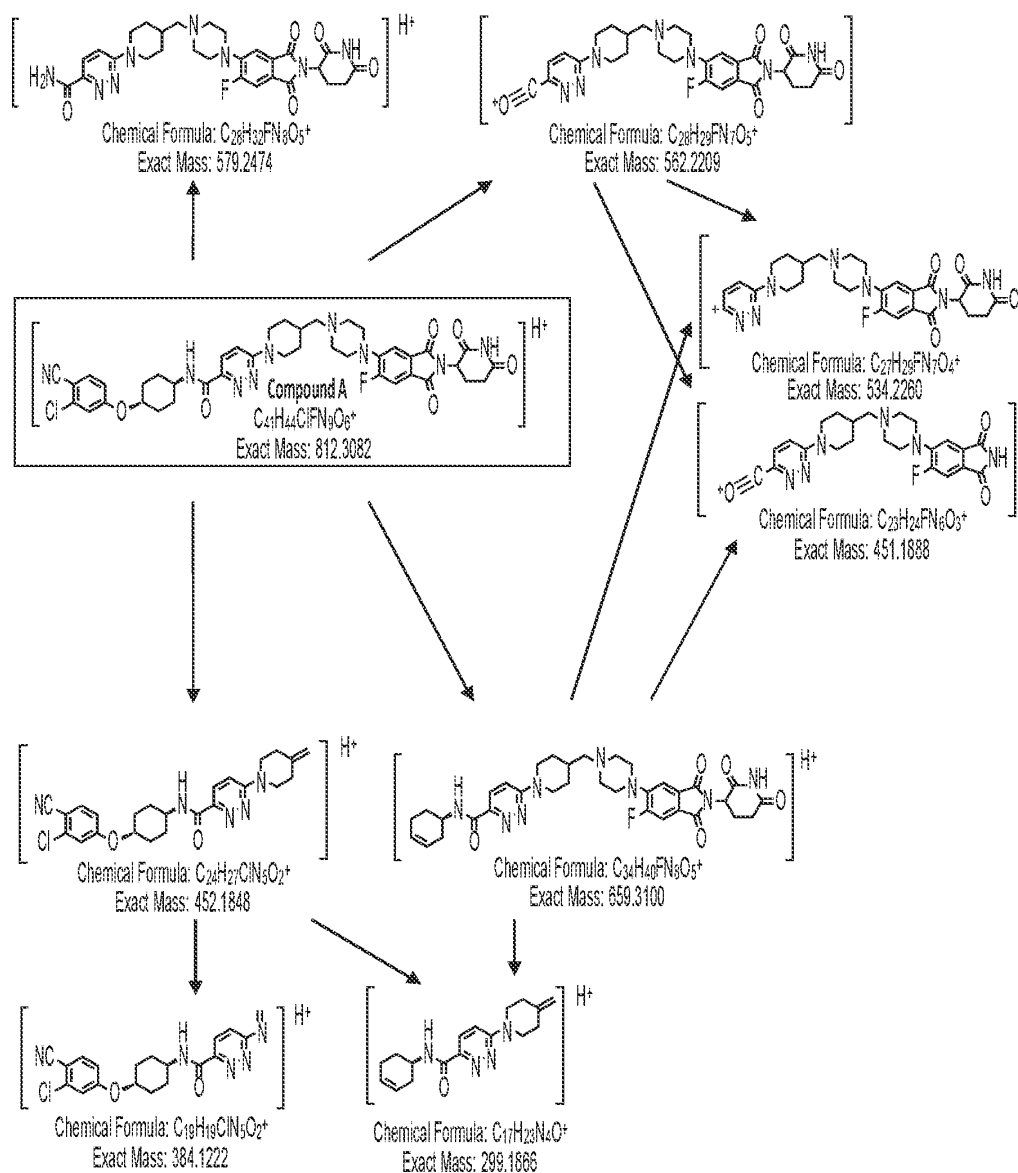
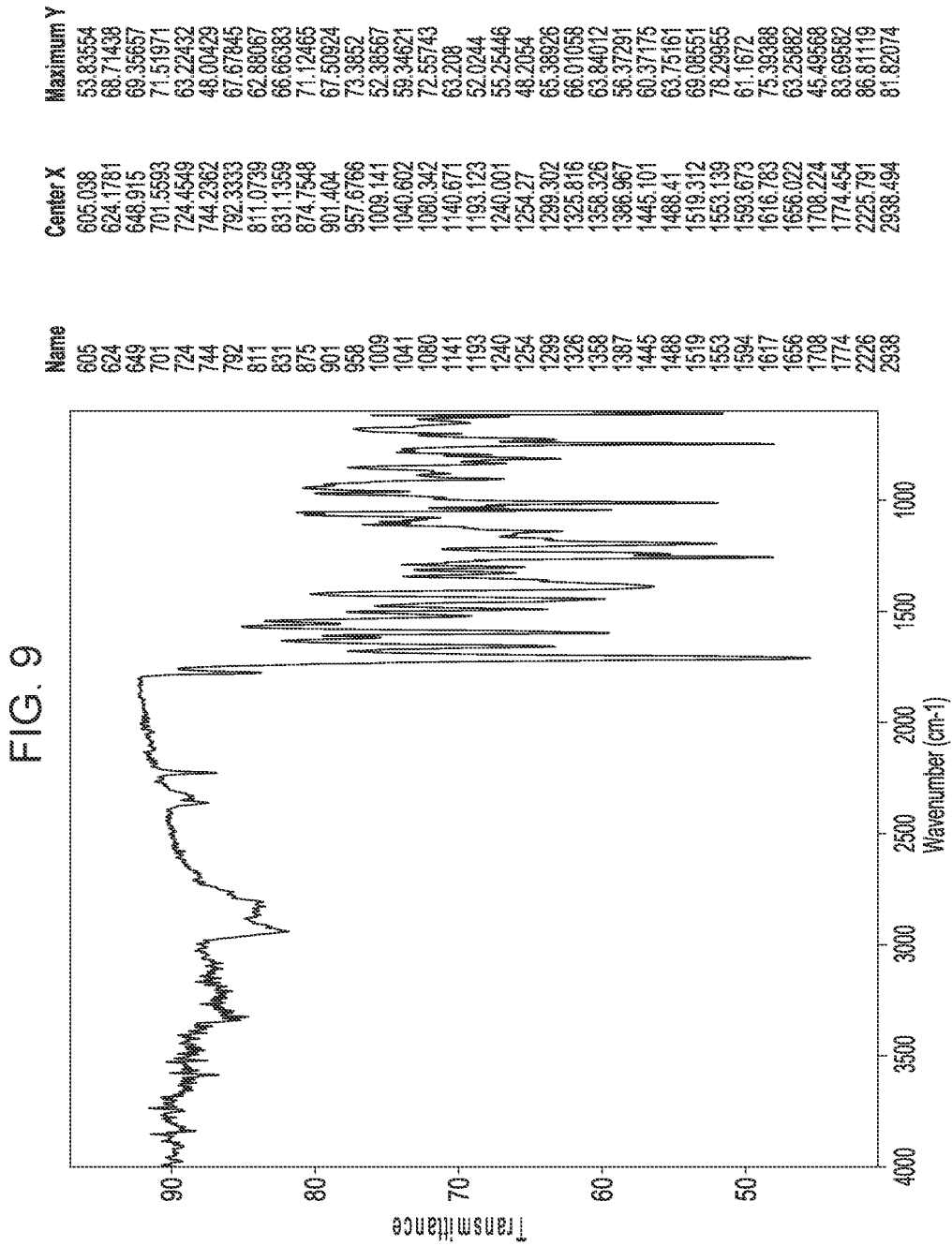


FIG. 8A



Ion (positively charge ions)		Molecular Formula	Exact mass	Experimental mass		mass error (ppm)
Compound A	MS ⁻¹ Parent mass)					
	MS ² Product 1	C ₄₁ H ₄₄ ClFN ₉ O ₆ ⁺	812.3082	812.3079		-0.4
	MS ² Product 2	C ₂₈ H ₂₉ FN ₇ O ₅ ⁺	562.2209	562.2193		-2.8
	MS ² Product 3	C ₂₈ H ₃₂ FN ₈ O ₅ ⁺	579.2474	579.2459		-2.6
	MS ² Product 4	C ₃₄ H ₄₀ FN ₈ O ₅ ⁺	659.3100	659.3081		-2.8
	MS ³ Product 1	C ₂₄ H ₂₇ ClN ₅ O ₂ ⁺	452.1848	452.1834		-3.2
	MS ³ Product 2	C ₂₇ H ₂₉ FN ₇ O ₄ ⁺	534.2260	534.2245		-2.7
	MS ³ Product 3	C ₂₃ H ₂₄ FN ₆ O ₃ ⁺	451.1888	451.1882		-1.4
	MS ³ Product 4	C ₁₇ H ₂₃ N ₄ O ⁺	299.1866	299.1866		0.1
		C ₁₉ H ₁₉ ClN ₅ O ₂ ⁺	384.1222	384.1221		-0.2

FIG. 8B



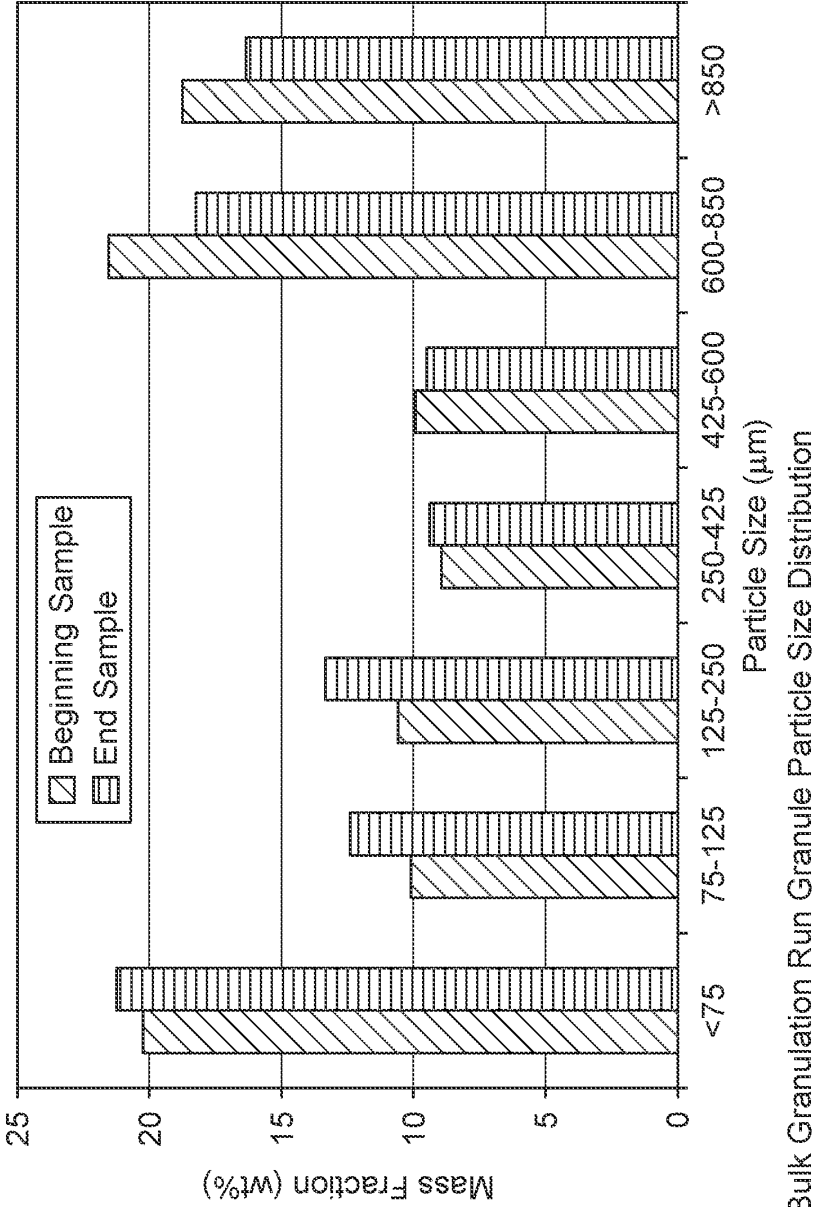


FIG. 10

FIG. 11

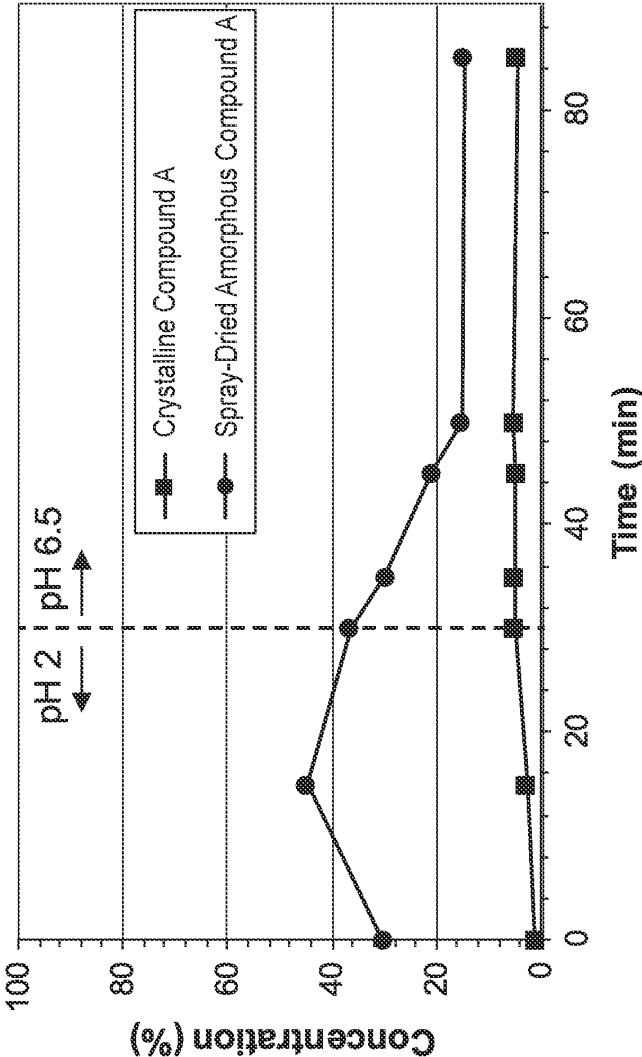
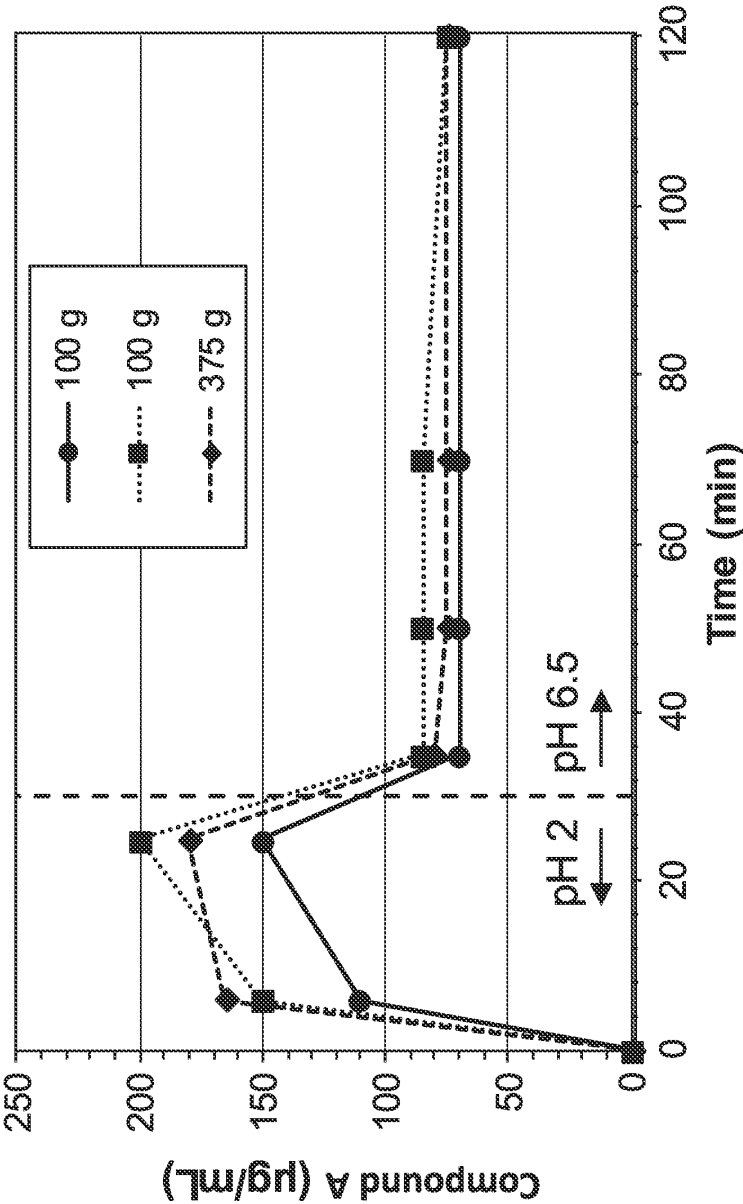


FIG. 12



Amorphous Compound A spray dried with PSD-1 dryer.

FIG. 13

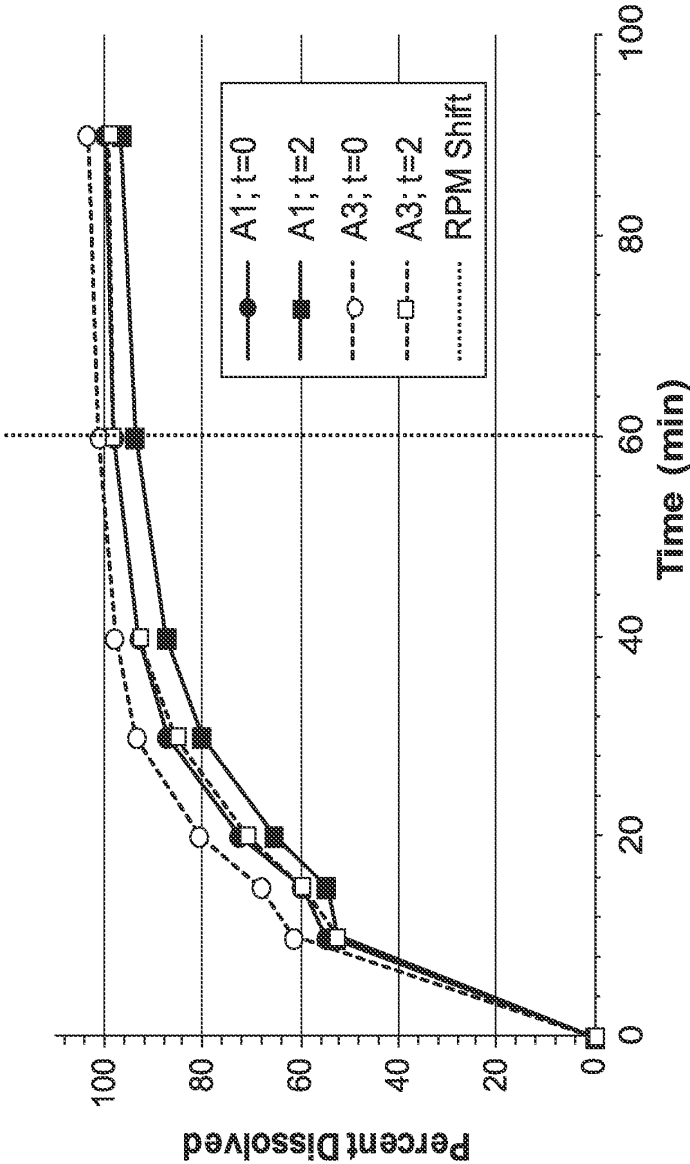


FIG. 14

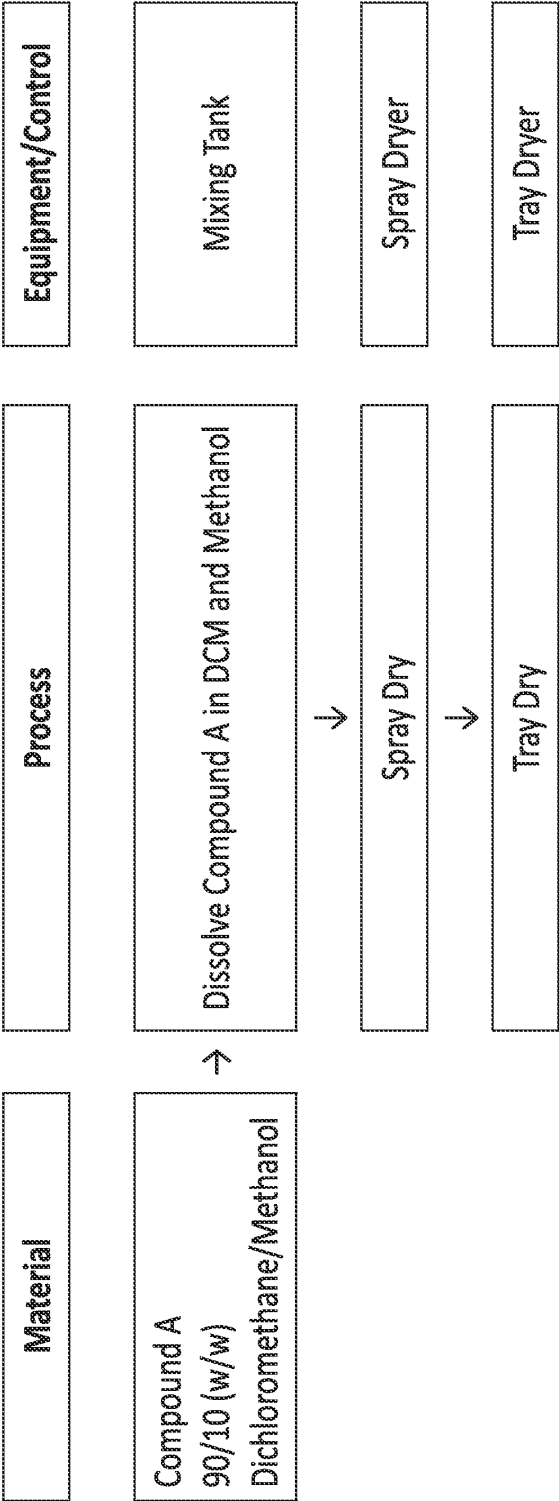
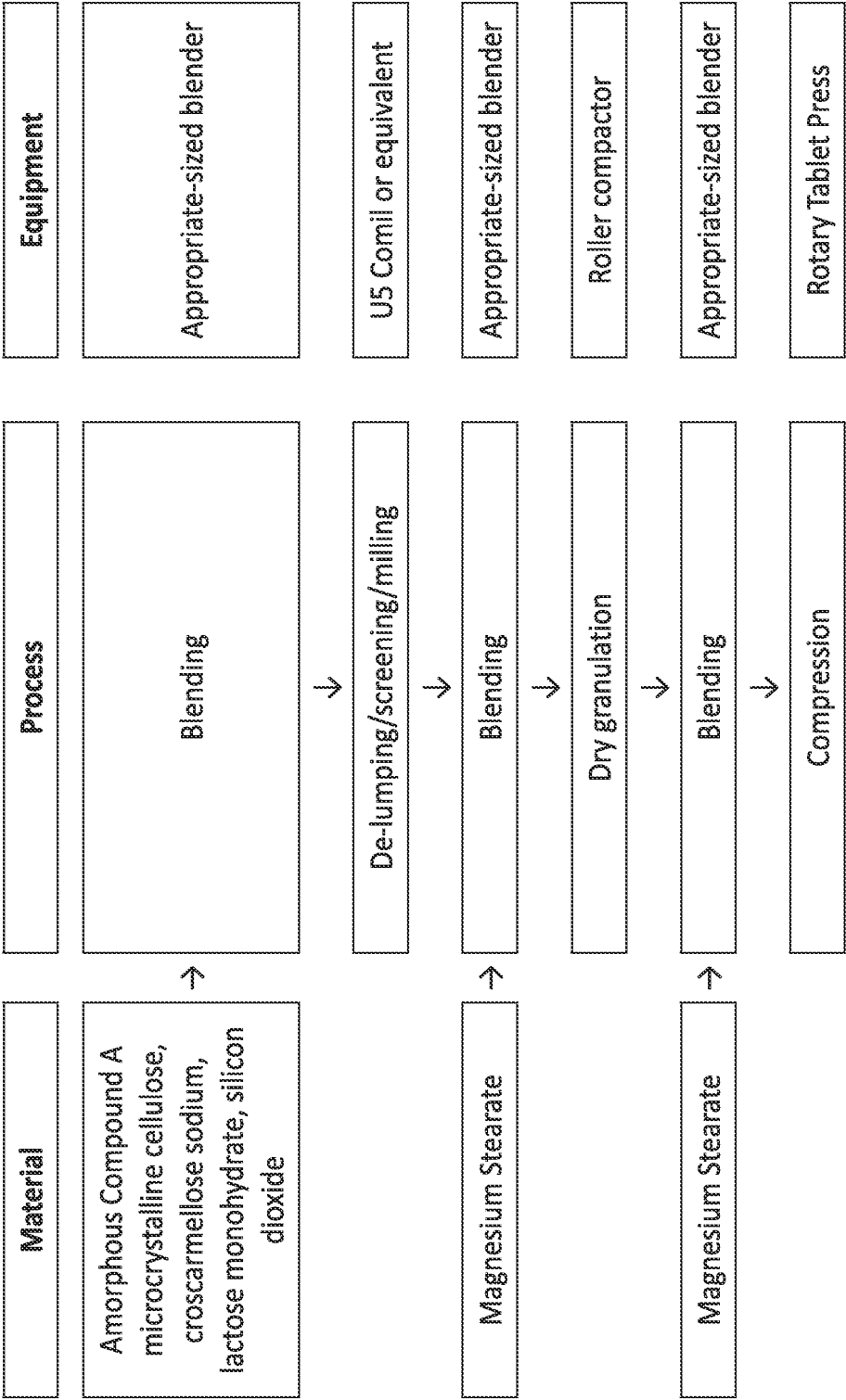
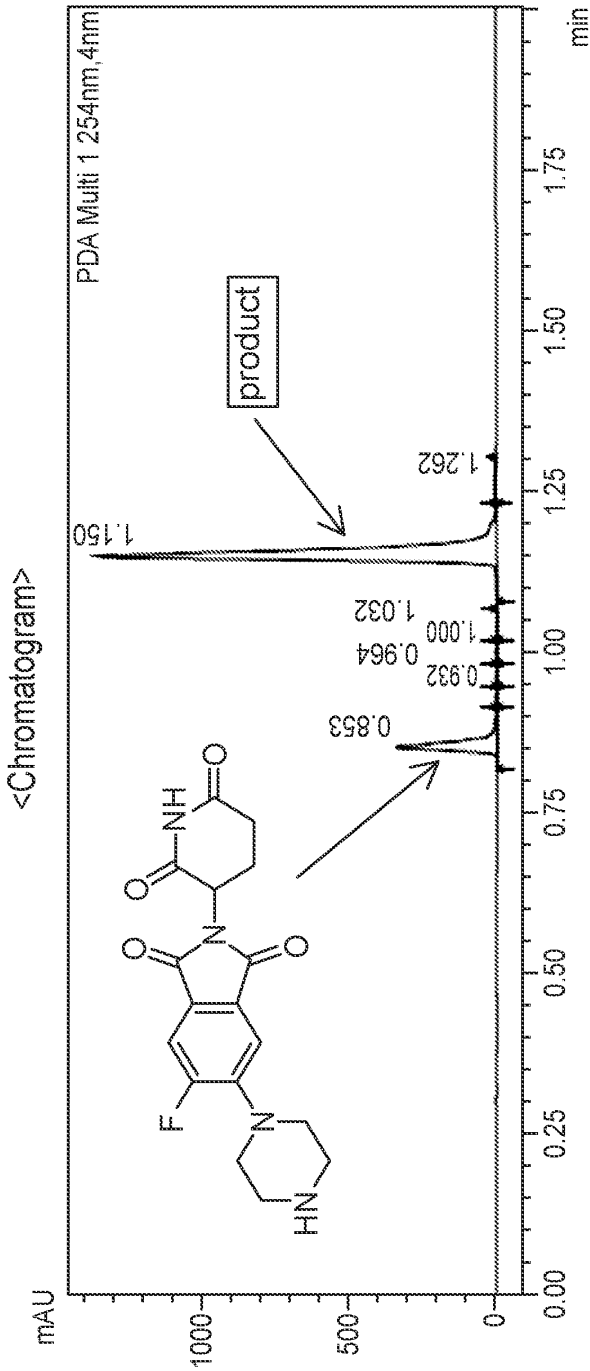


FIG. 15





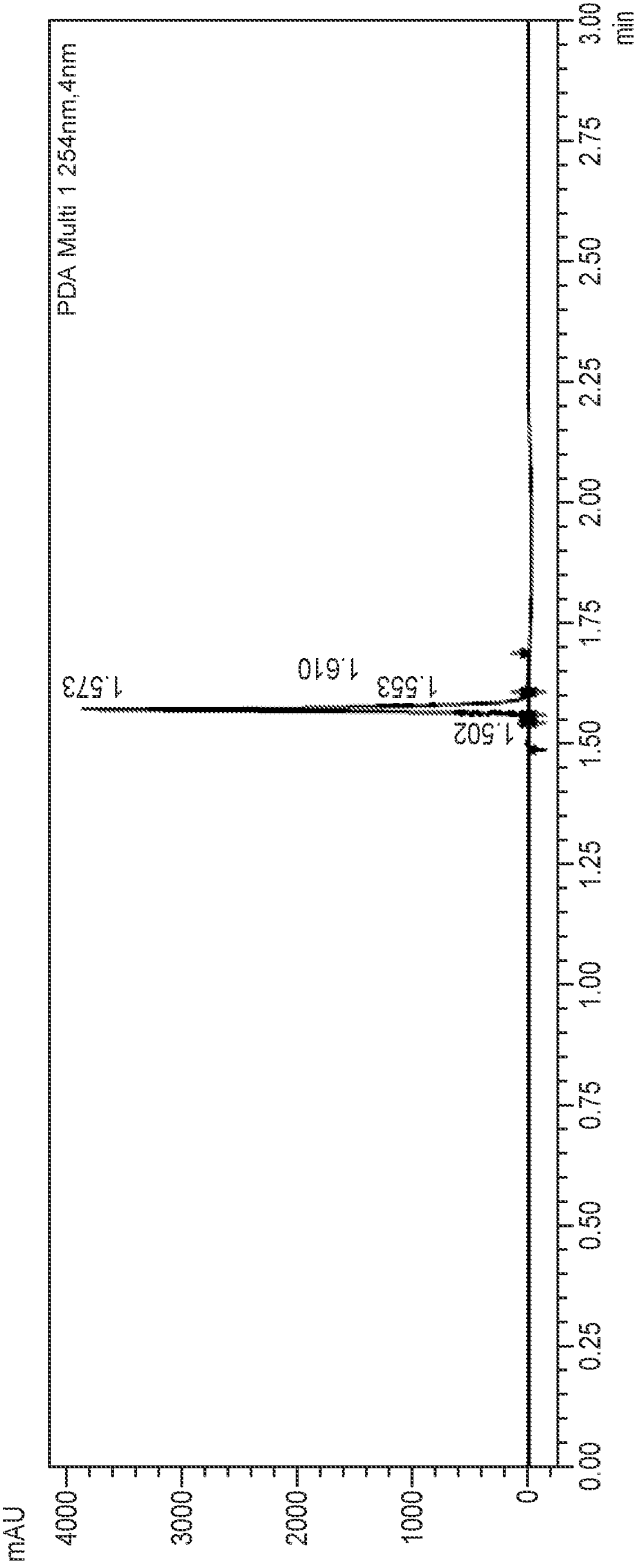
Peak Table
PDA Ch1 254 nm

Peak#	Ret. Time	Height	Height%	Area	Area%
1	0.853	341842	19.124	306598	16.923
2	0.932	4188	0.256	4596	0.254
3	0.964	3114	0.190	4054	0.224
4	1.000	3974	0.243	4886	0.270
5	1.032	2784	0.170	2912	0.161
6	1.150	1303833	79.704	1477330	84.546
7	1.262	5108	0.312	11309	0.624
Total		1635842	100.000	1811685	100.000

FIG. 16B

<<LC Time Program>>			
Time	Module	Command	Value
0.01	Pumps	Pump B Conc.	5
1.10	Pumps	Pump B Conc.	100
1.70	Pumps	Pump B Conc.	100
1.75	Pumps	Pump B Conc.	5
2.00	Controller	Stop	

FIG. 16C



Peak Table
PDA Ch1 254 nm

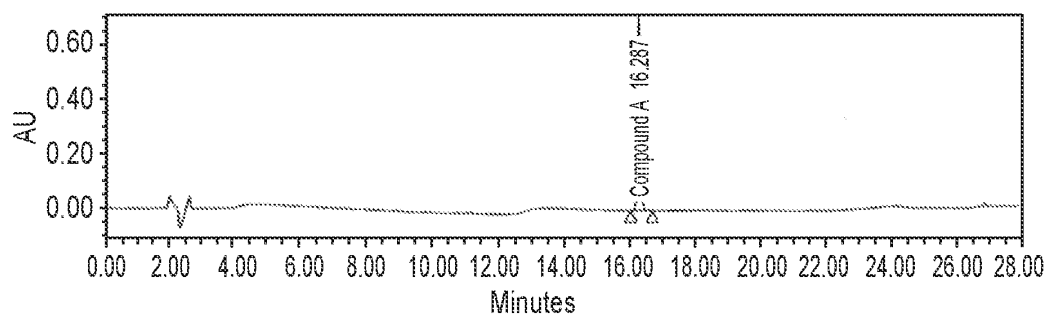
Peak#	Ret. Time	Height	Height%	Area	Area%
1	1.502	12269	0.423	12575	0.544
2	1.553	4493	0.155	17177	0.744
3	1.573	2868769	98.913	2263377	97.980
4	1.610	14760	0.509	16910	0.732
Total		2900291	100.000	2310039	100.000

FIG. 16D

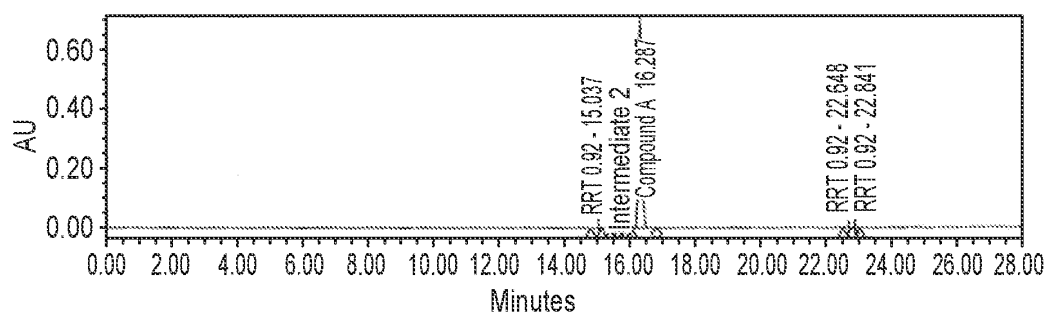
<<LC Time Program>>			
Time	Module	Command	Value
0.01	Pumps	Pump B Conc.	5
2.00	Pumps	Pump B Conc.	95
2.70	Pumps	Pump B Conc.	95
2.75	Pumps	Pump B Conc.	5
3.00	Controller	Stop	

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FIG.17A



Vial 3; Injection 1; Injection Volume 10.00; Run Time 28.00; Channel Description PDA 200.0 to 350.0 nm at 1.2 nm;
 — Processed Channel Descr. PDA 220.0 nm; Integration Algorithm ApexTrack; Peak Width 30.00; Threshold 100.000;
 Manual No; Result Id 4417; Sample Set Id 4343; Processing Method Id 4379

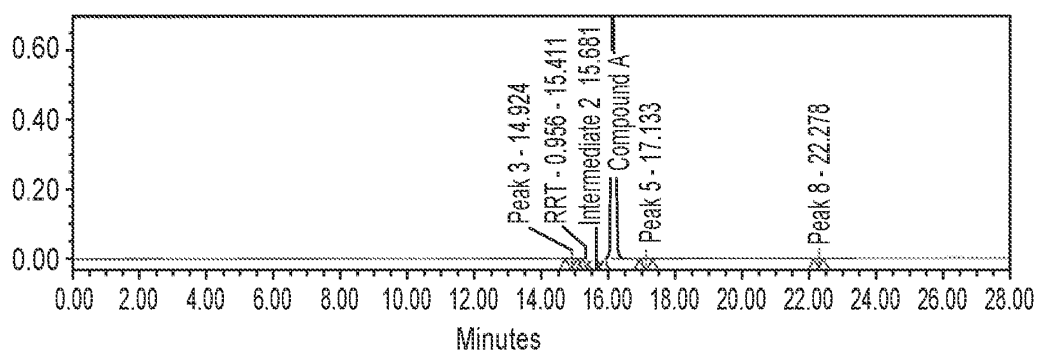


Vial 3; Injection 1; Injection Volume 10.00; Run Time 28.00; Channel Description PDA 200.0 to 350.0 nm at 1.2 nm;
 — Processed Channel Descr. PDA 260.0 nm; Integration Algorithm ApexTrack; Peak Width 30.00; Threshold 100.000;
 Manual No; Result Id 4449; Sample Set Id 4343; Processing Method Id 4378

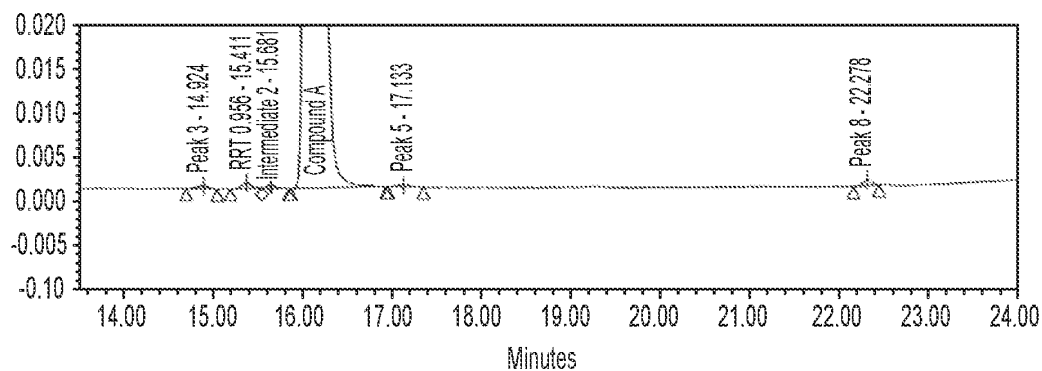
Component Results

	Name	Int Type	RT	Height	Area	% Area
1	RRT 0.92	bb	15.037	258	2688	0.06
2	Intermediate 2	BV	15.547	797	4834	0.10
3	RRT 0.96	VB	15.682	654	4178	0.09
4	Compound A	BB	16.287	679240	4859094	100.00
5	Compound A	Bv	16.287	676579	4838227	99.60
6	RRT 1.39	BV	22.648	975	6120	0.13
7	RRT 1.40	Vb	22.841	262	1657	0.03

FIG.17B



Vial 5; Injection 1; Injection Volume 10.00; Run Time 28.00; Channel Description PDA, 200.0 to 350.0 nm at 1.2 nm; Processed Channel Descr. PDA 260.0 nm; Integration Algorithm ApexTrack; Peak Width 10.00; Threshold 25.000; Manual No; Result Id 7390; Sample Set Id 7003; Processing Method Id 7198



Component Results

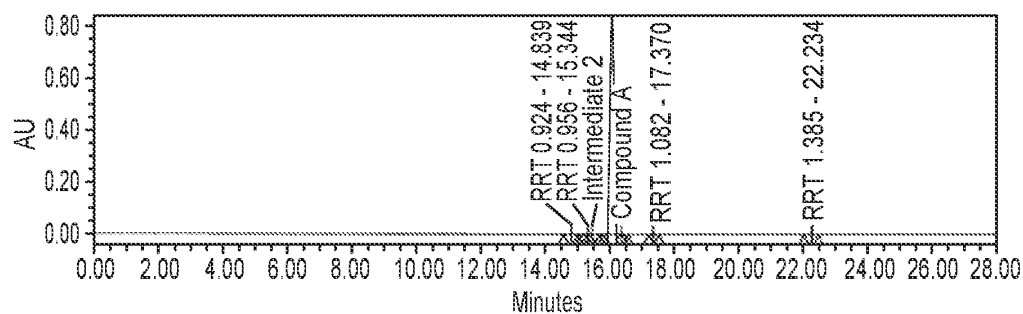
	Name	RT	Height	Area	% Area	Processed Channel Descr	Result Id
1	Peak 3	14.924	379	3389	0.067	PDA 260.0 nm	7390
2	RRT 0.956	15.411	724	5523	0.110	PDA 260.0 nm	7390
3	Intermediate 2	15.681	419	3061	0.061	PDA 260.0 nm	7390
4	Compound A	16.121	660612	5007172	99.621	PDA 260.0 nm	7390
5	Peak 5	17.133	280	2457	0.049	PDA 260.0 nm	7390
6	Peak 8	22.278	673	4612	0.092	PDA 260.0 nm	7390

FIG.17C

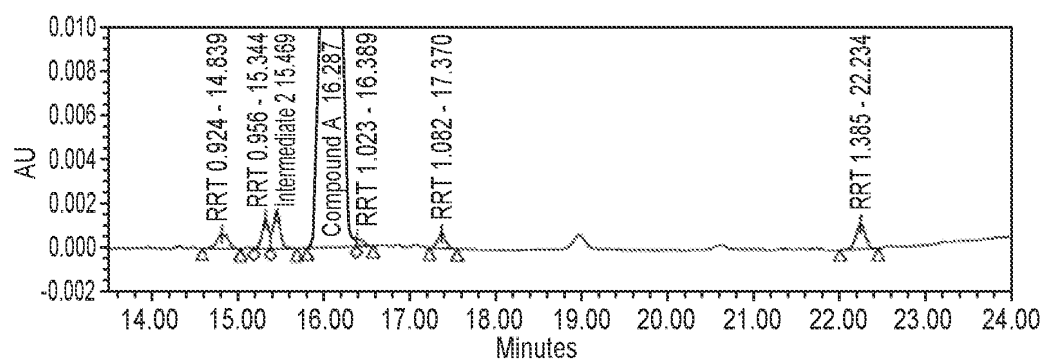
Time (min)	% A	% A
0:00	95	5
1:00	95	5
10:00	55	45
20:00	45	55
24:00	5	95
28:00	5	95
28:01	95	5
36:00	95	5

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FIG.18A



Vial 5; Injection 1; Injection Volume 10.00; Run Time 28.00; Channel Description W2489 ChA 260nm; Processed Channel
 Descr. W2489 ChA 260nm; Integration Algorithm ApexTrack; Peak Width 10.00; Threshold 10.000; Manual No; Result Id
 2177; Sample Set Id 2104; Processing Method Id 2138



Component Results

	Name	Int Type	RT	Area	% Area	RT Ratio
1	Intermediate 10	Missing	4.988			
2	Intermediate 5	Missing	8.042			
3	RRT 0.531	Missing	8.502			
4	RRT 0.686	Missing	10.976			
5	Intermediate 7	Missing	11.569			
6	RRT 0.894	Missing	14.282			
7	RRT 0.903	Missing	14.426			
8	RRT 0.924	BB	14.839	6179	0.13	0.924
9	RRT 0.956	VV	15.344	7021	0.14	0.955
10	Intermediate 2	VB	15.469	9520	0.20	0.963
11	/Compound A	BV	16.061	4814283	99.23	1.000
12	RRT 1.023	VB	16.389	1846	0.04	1.020
13	Intermediate 3	Missing	16.644			
14	Impurity 1	Missing	16.816			

FIG.18B

Time (min)	% A	% B
0:00	95.0	5.0
1:00	95.0	5.0
10:00	55.0	45.0
20:00	.045	55.0
24:00	5.0	95.0
28:00	5.0	95.0
28:01	95.0	5.0
36:00	95.0	5.0

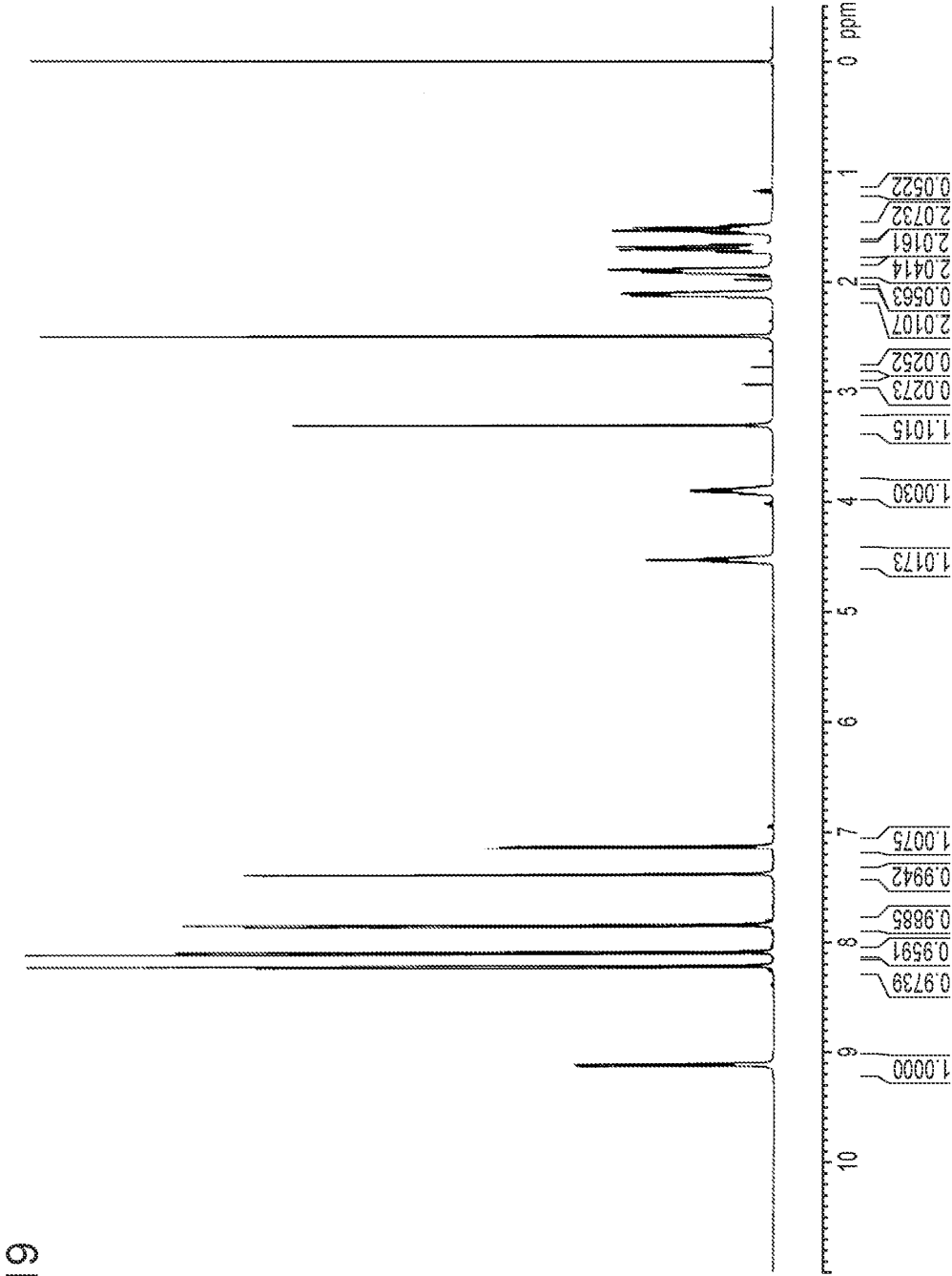


FIG. 19

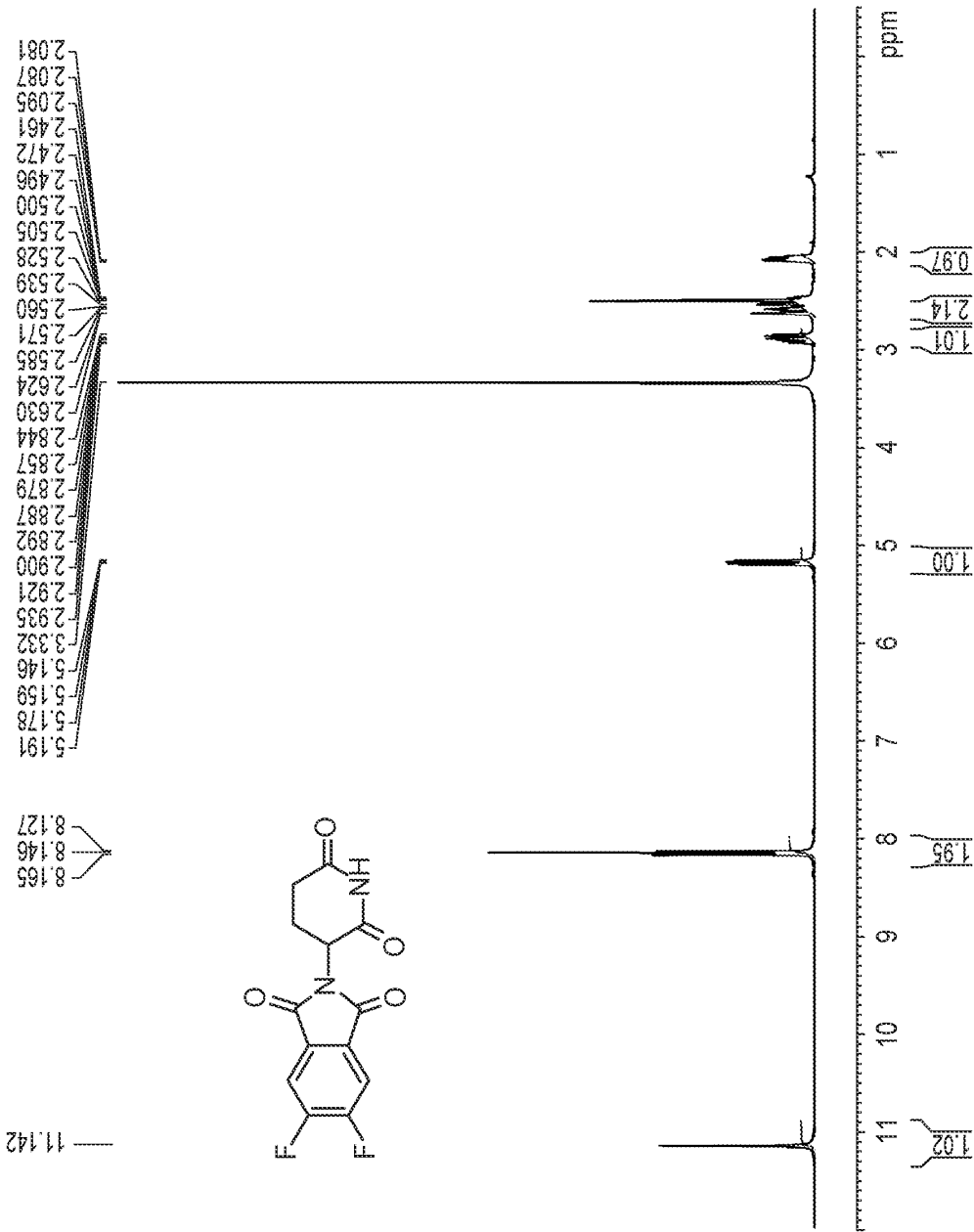


FIG. 20

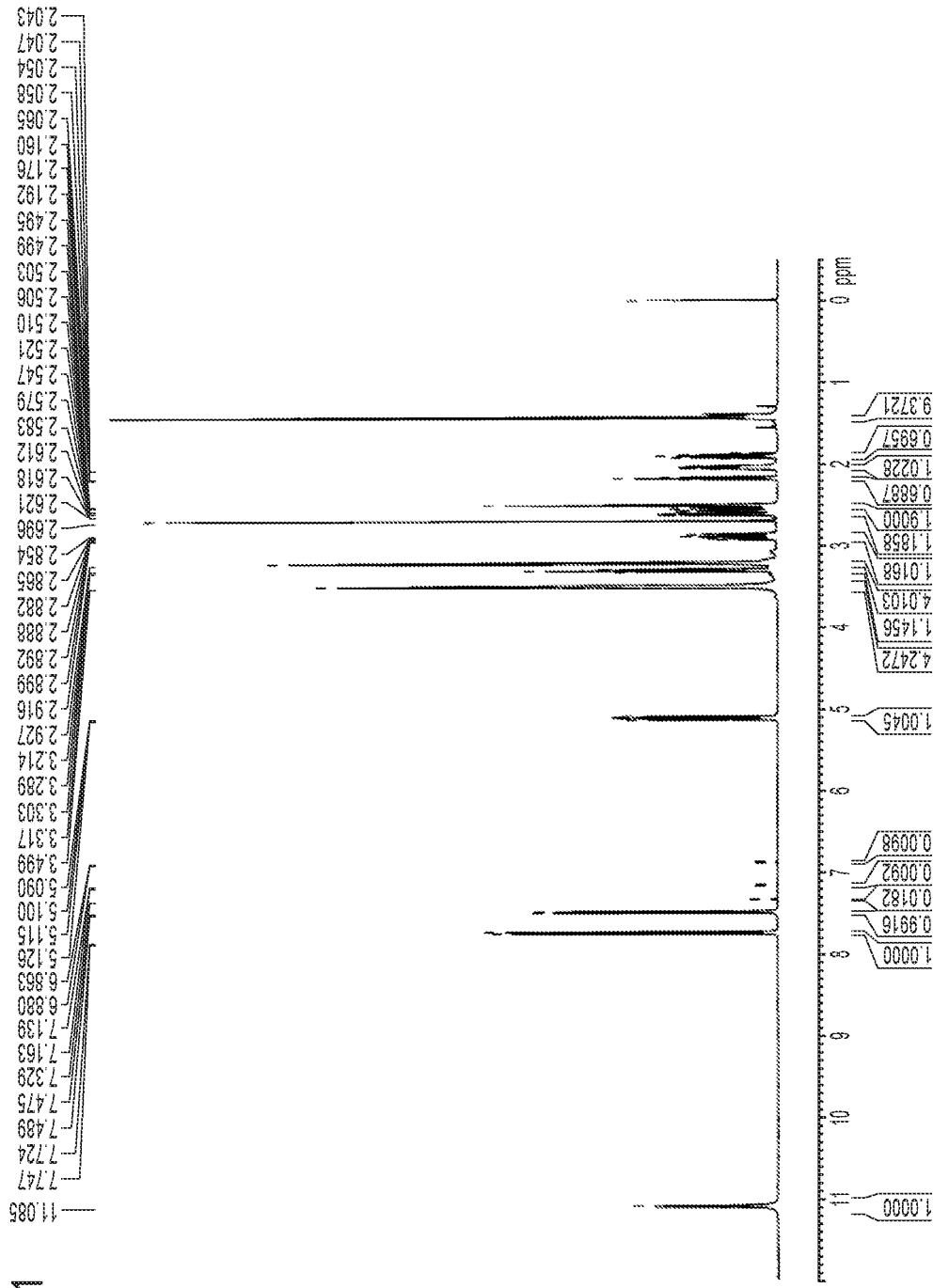


FIG. 21

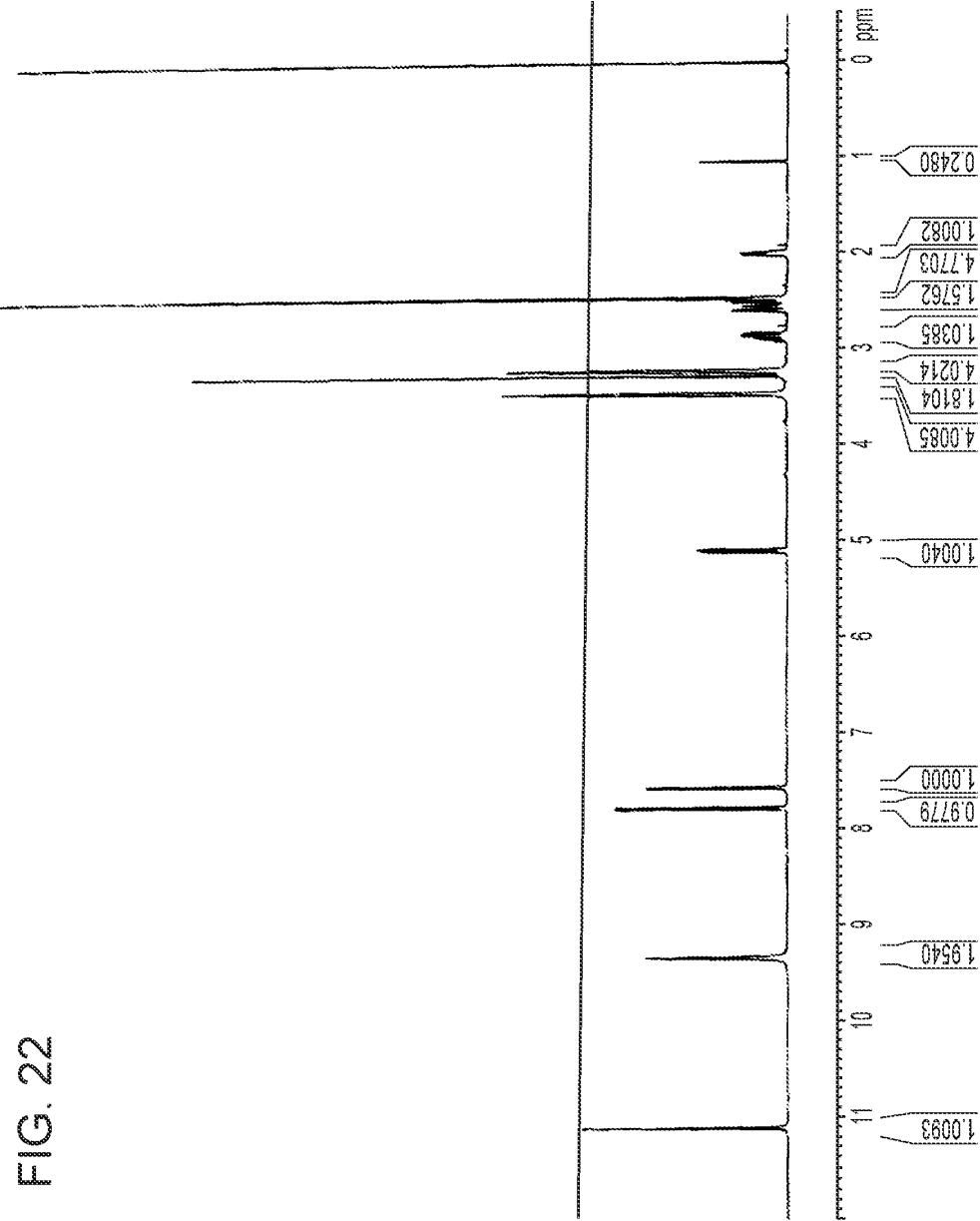
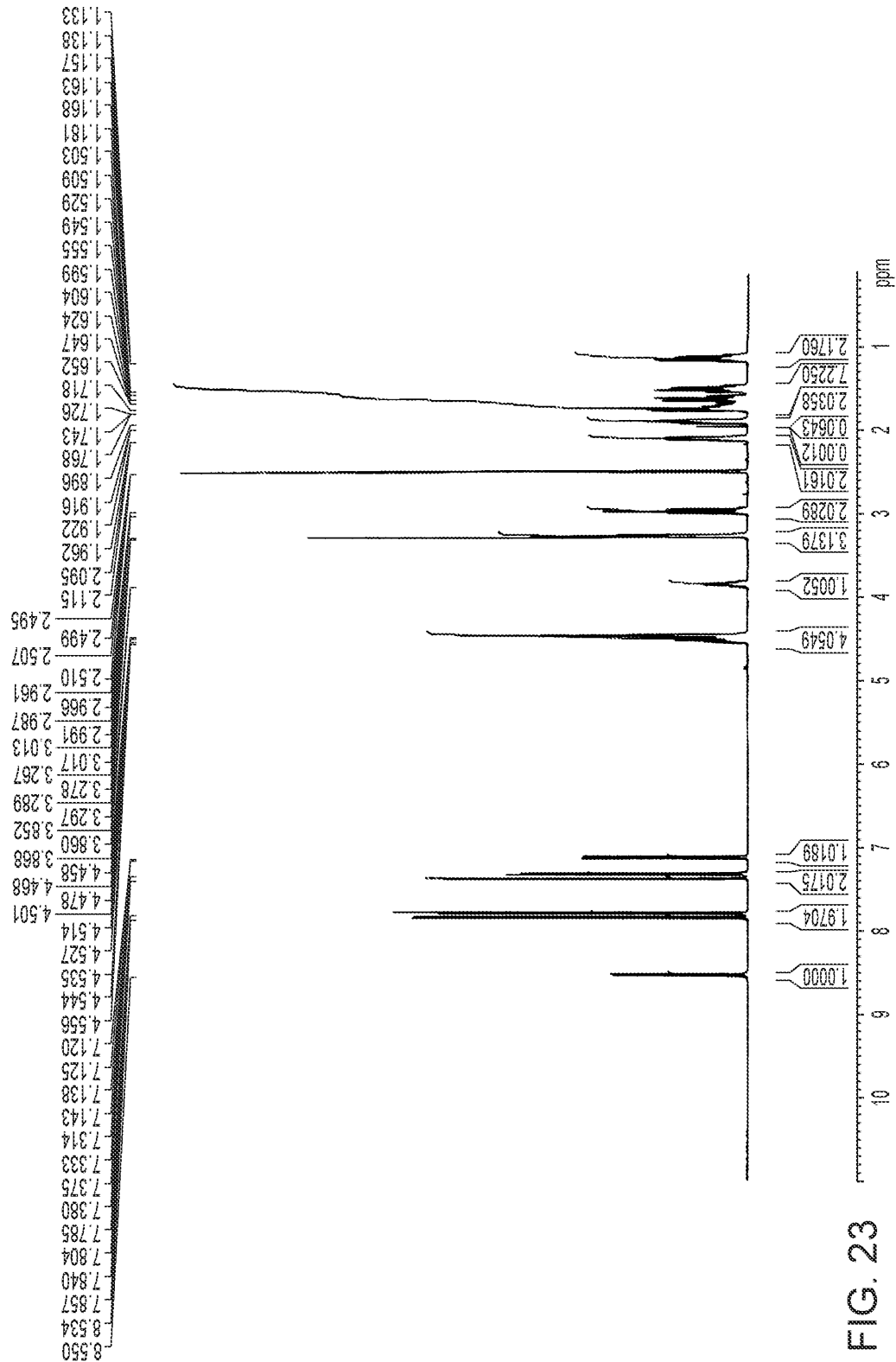


FIG. 22



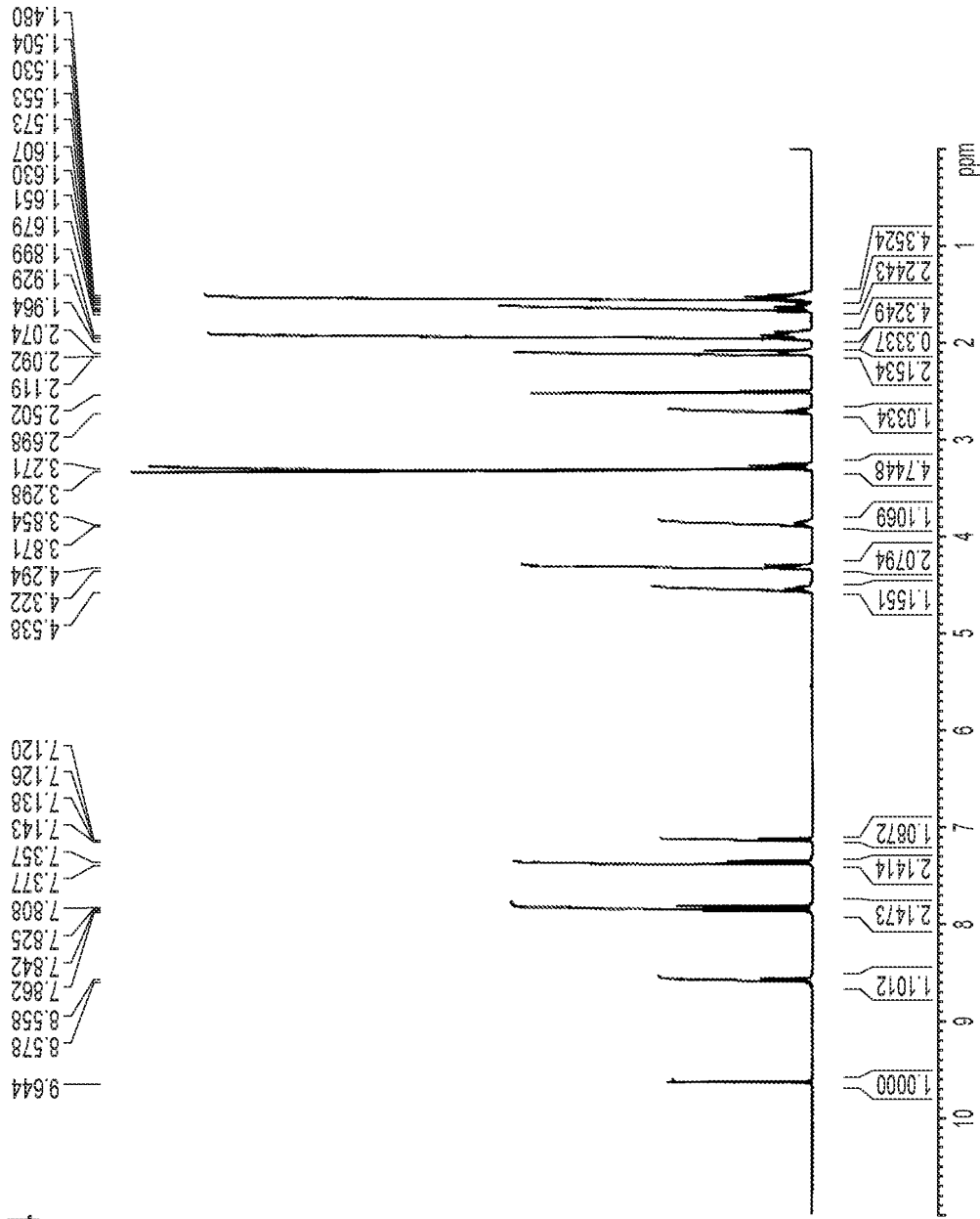
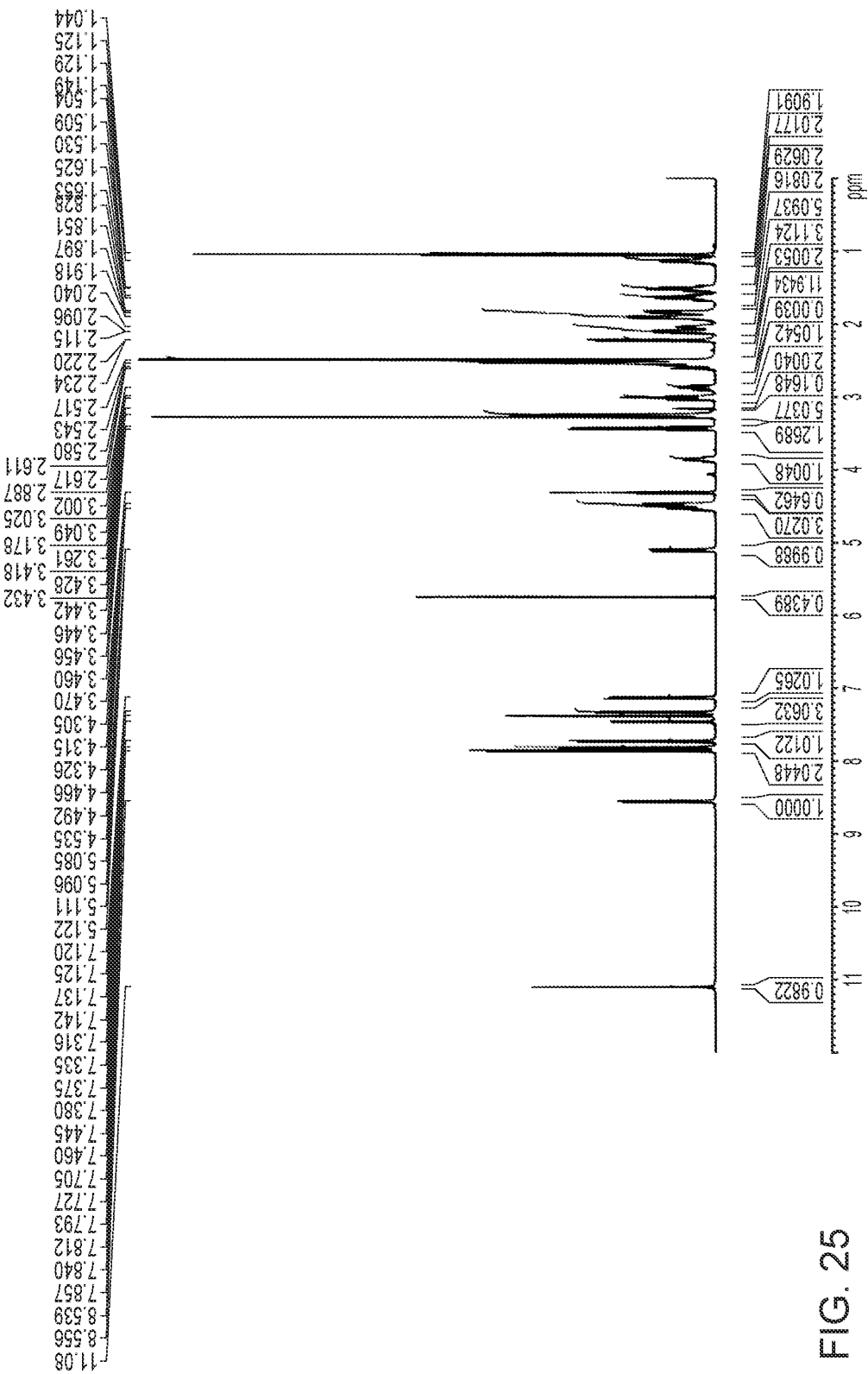


FIG. 24



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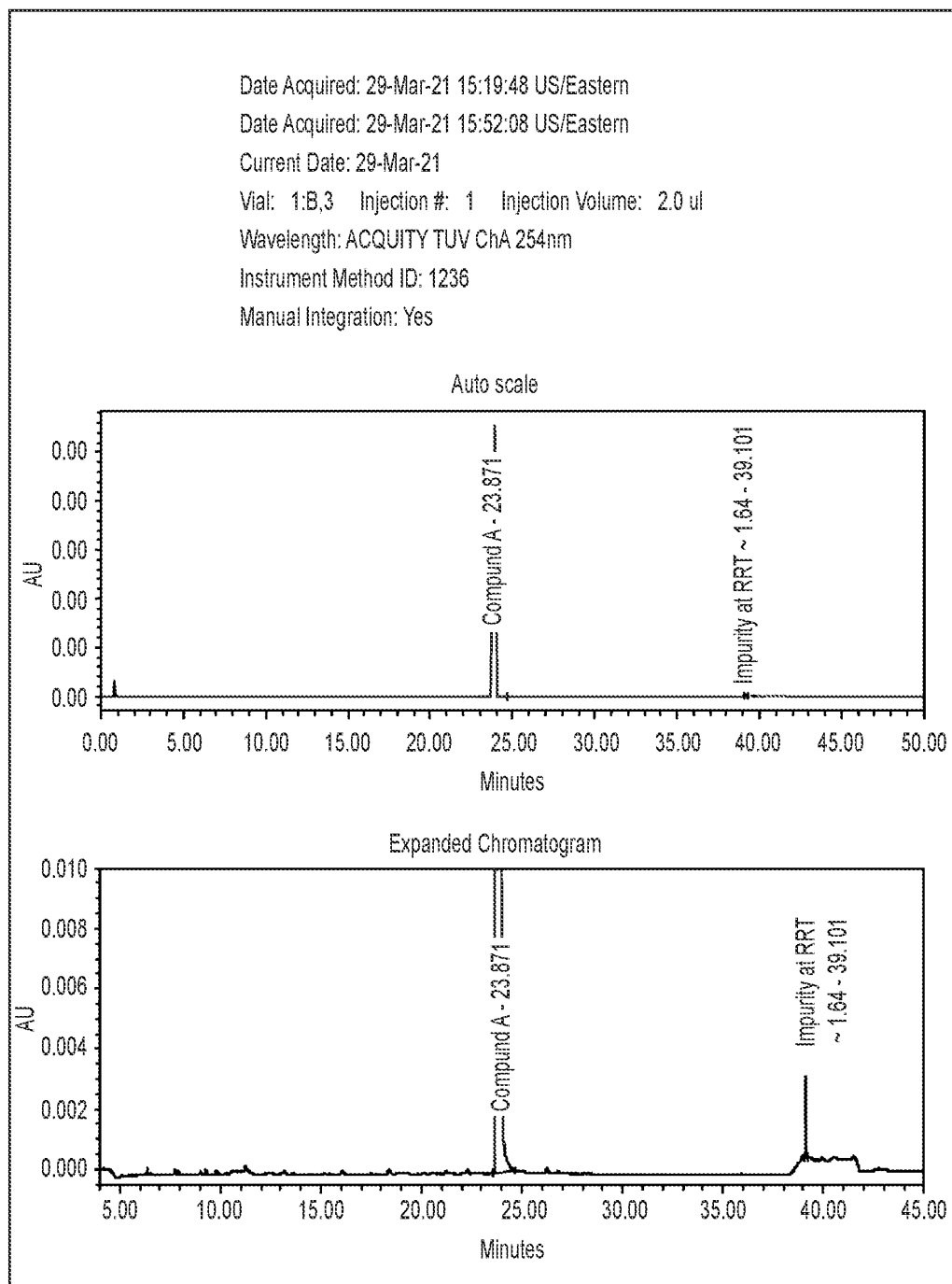


FIG. 26

FIG. 27

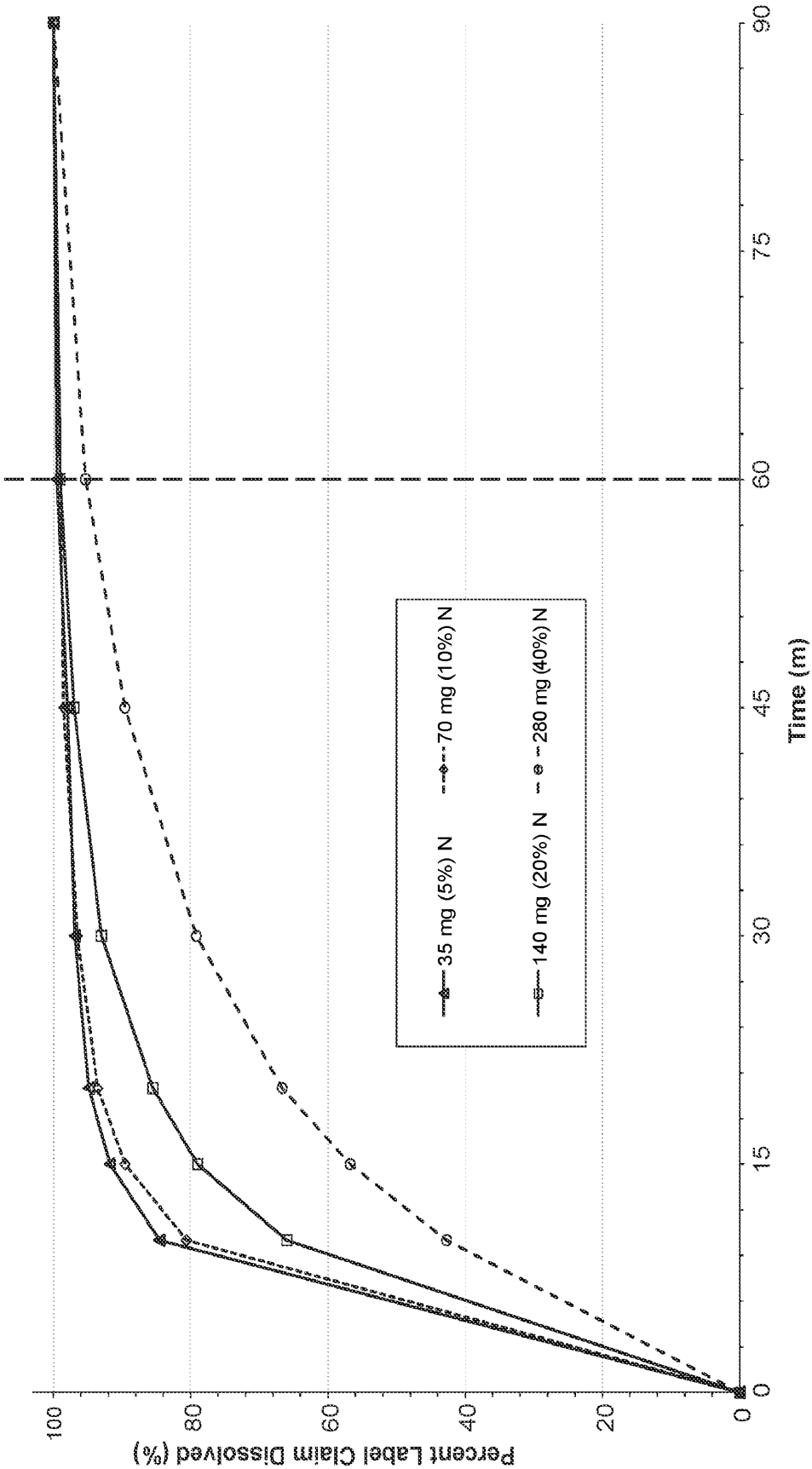


FIG. 28

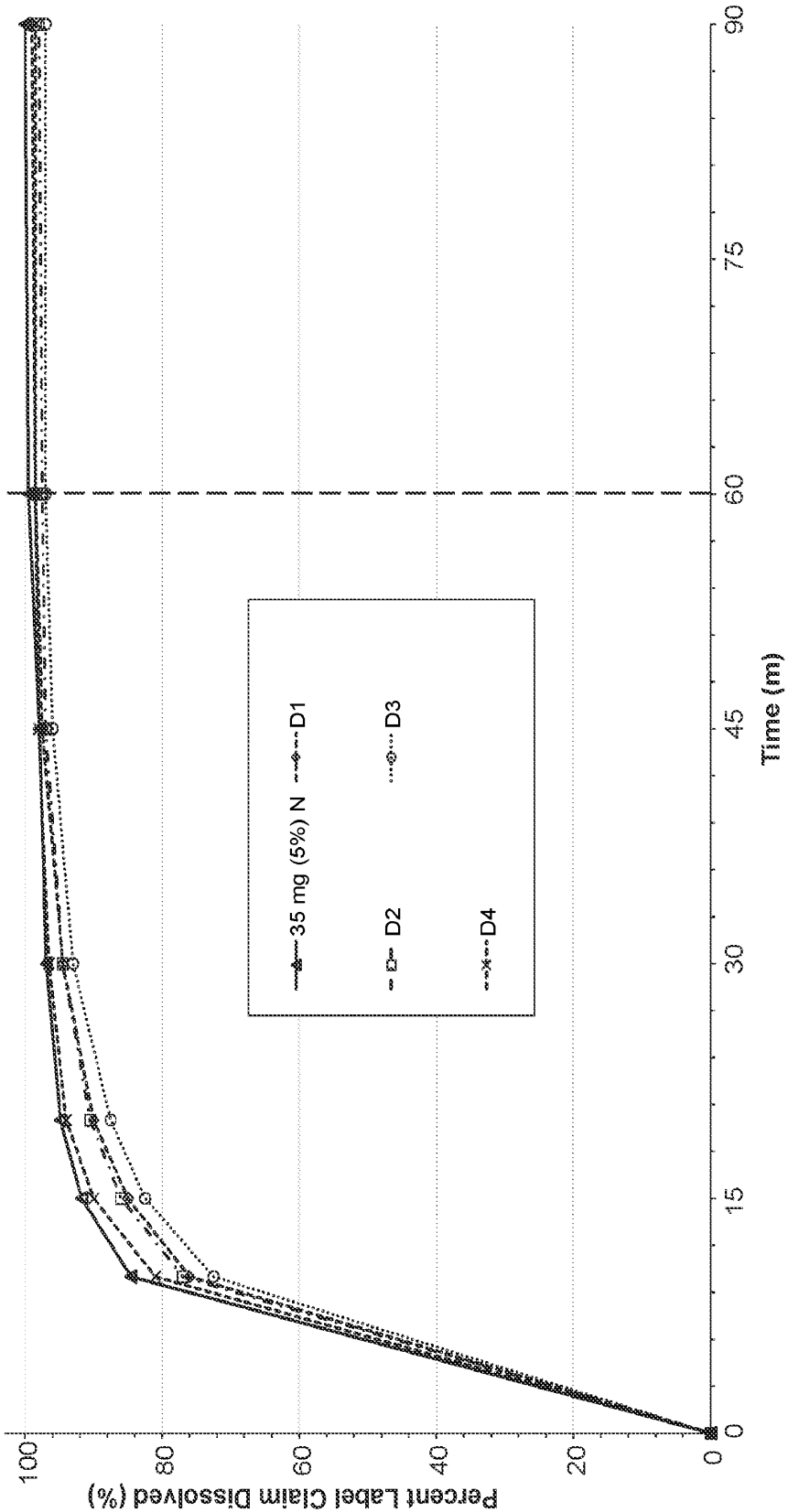


FIG. 29

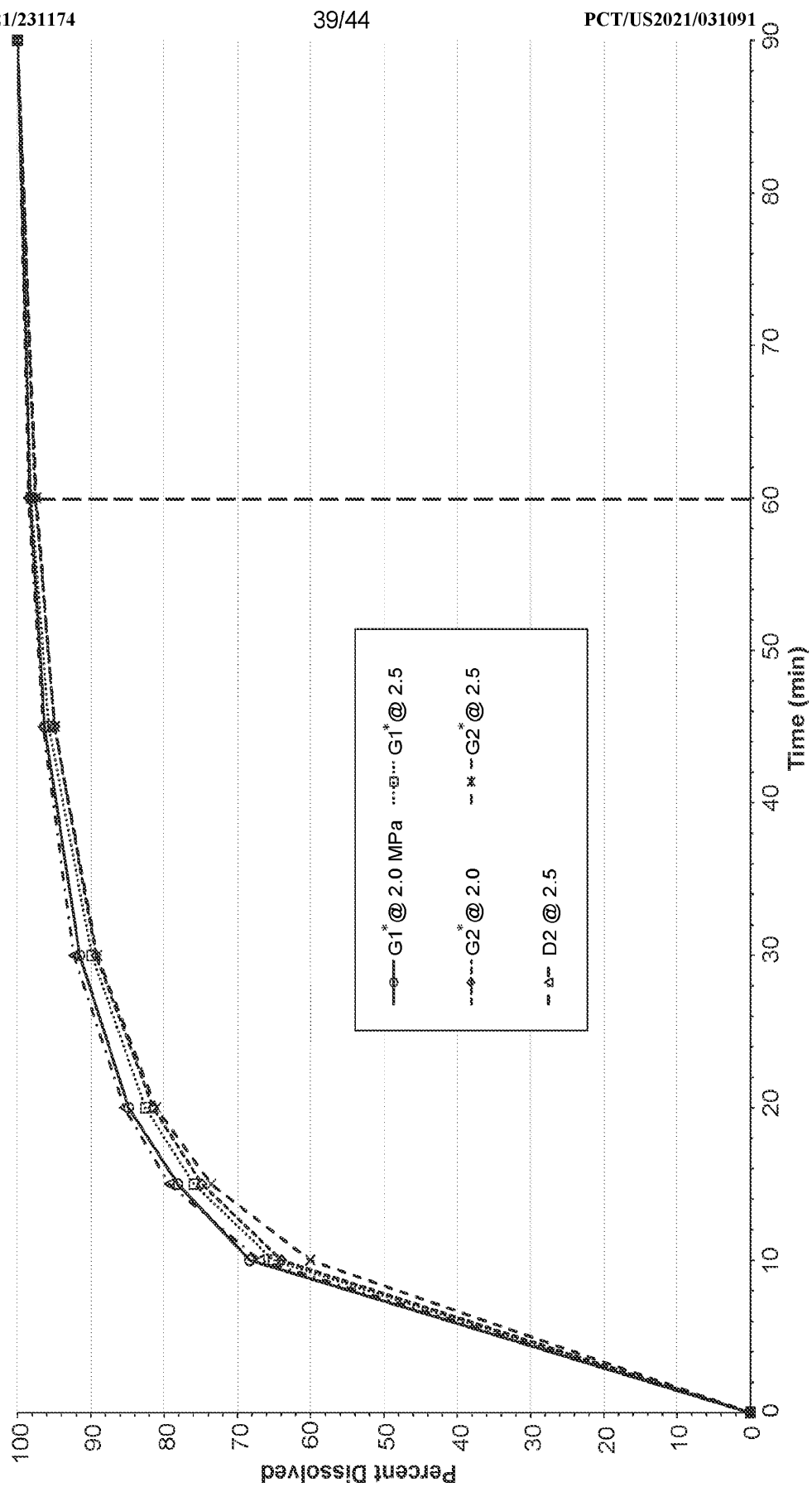


FIG. 30A

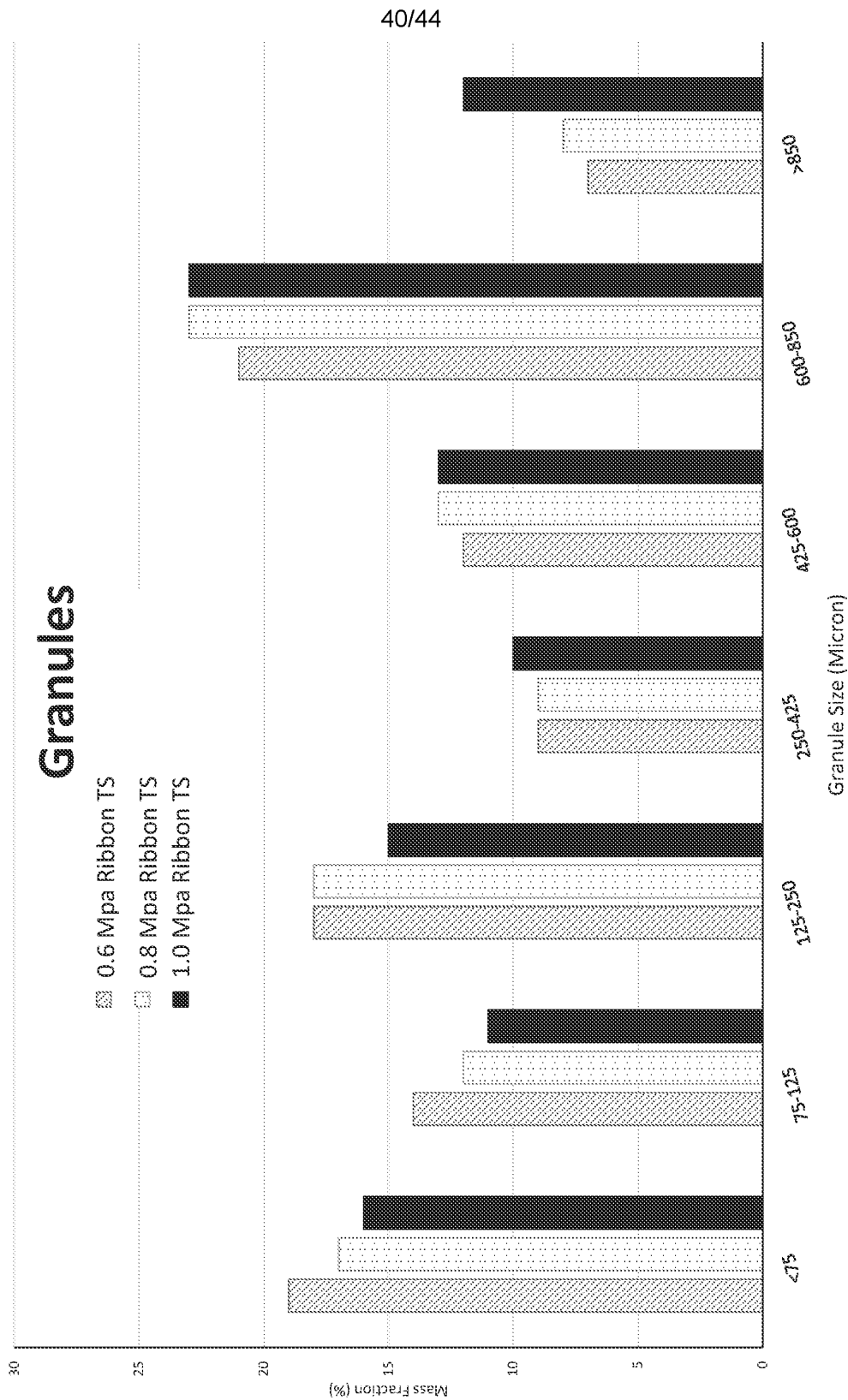


FIG. 30B

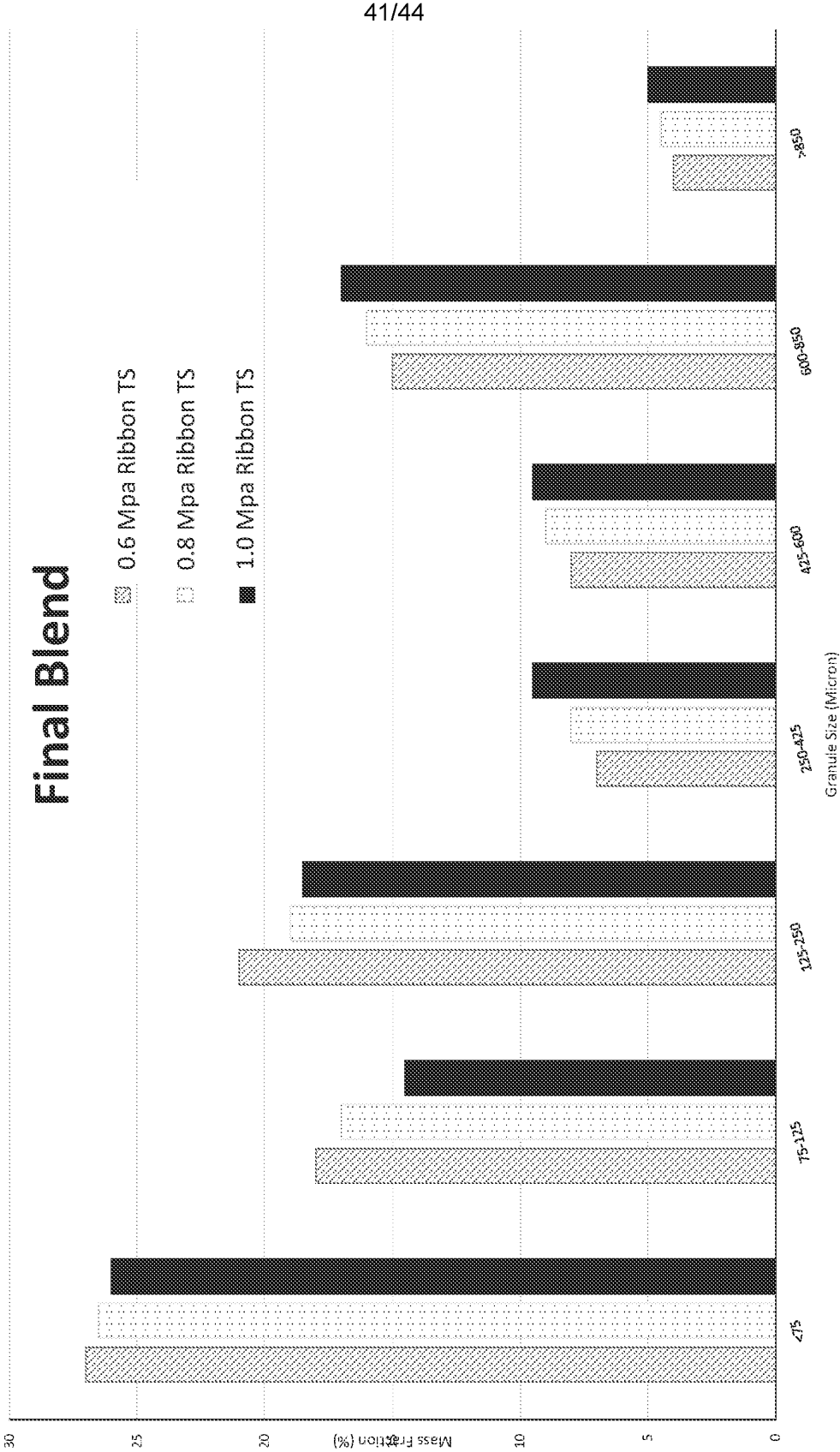


FIG. 31

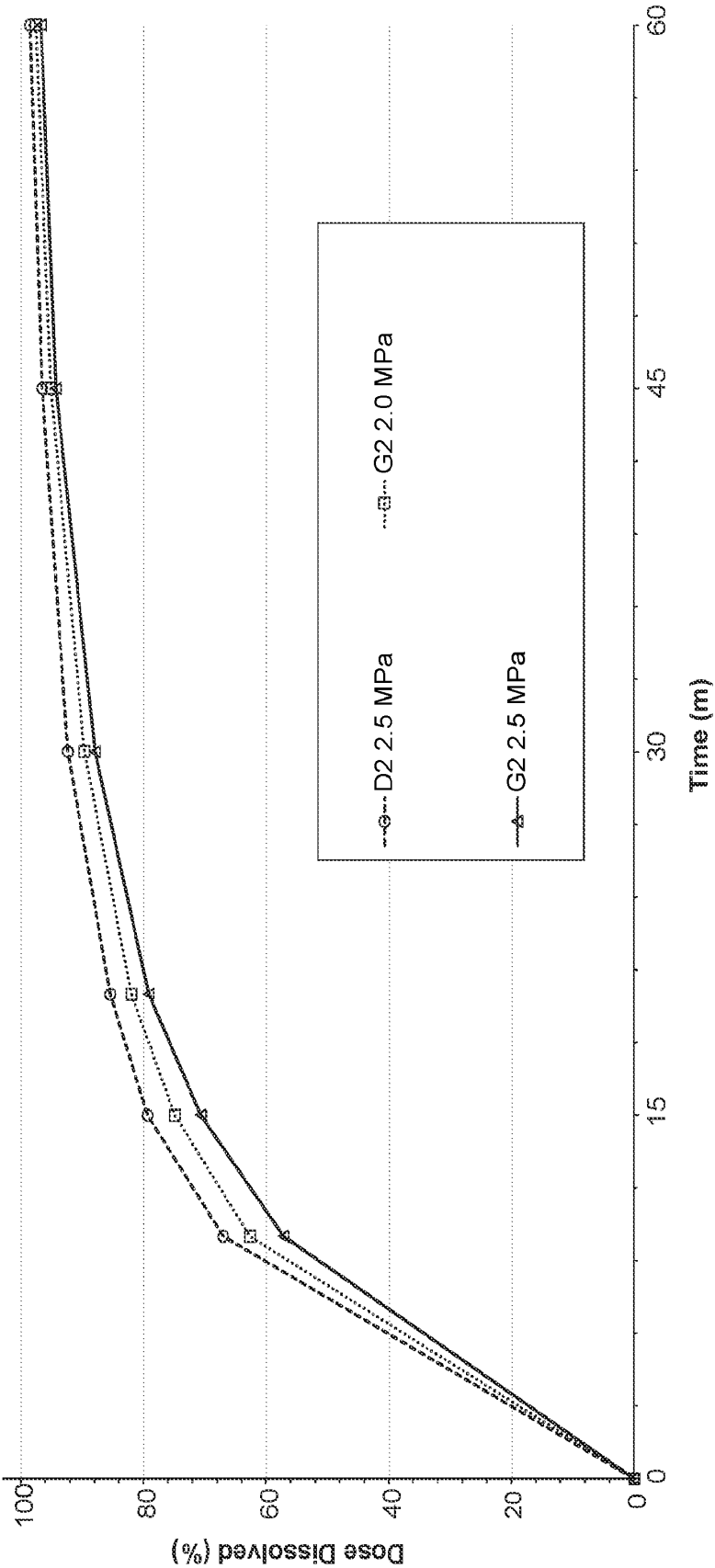


FIG. 32

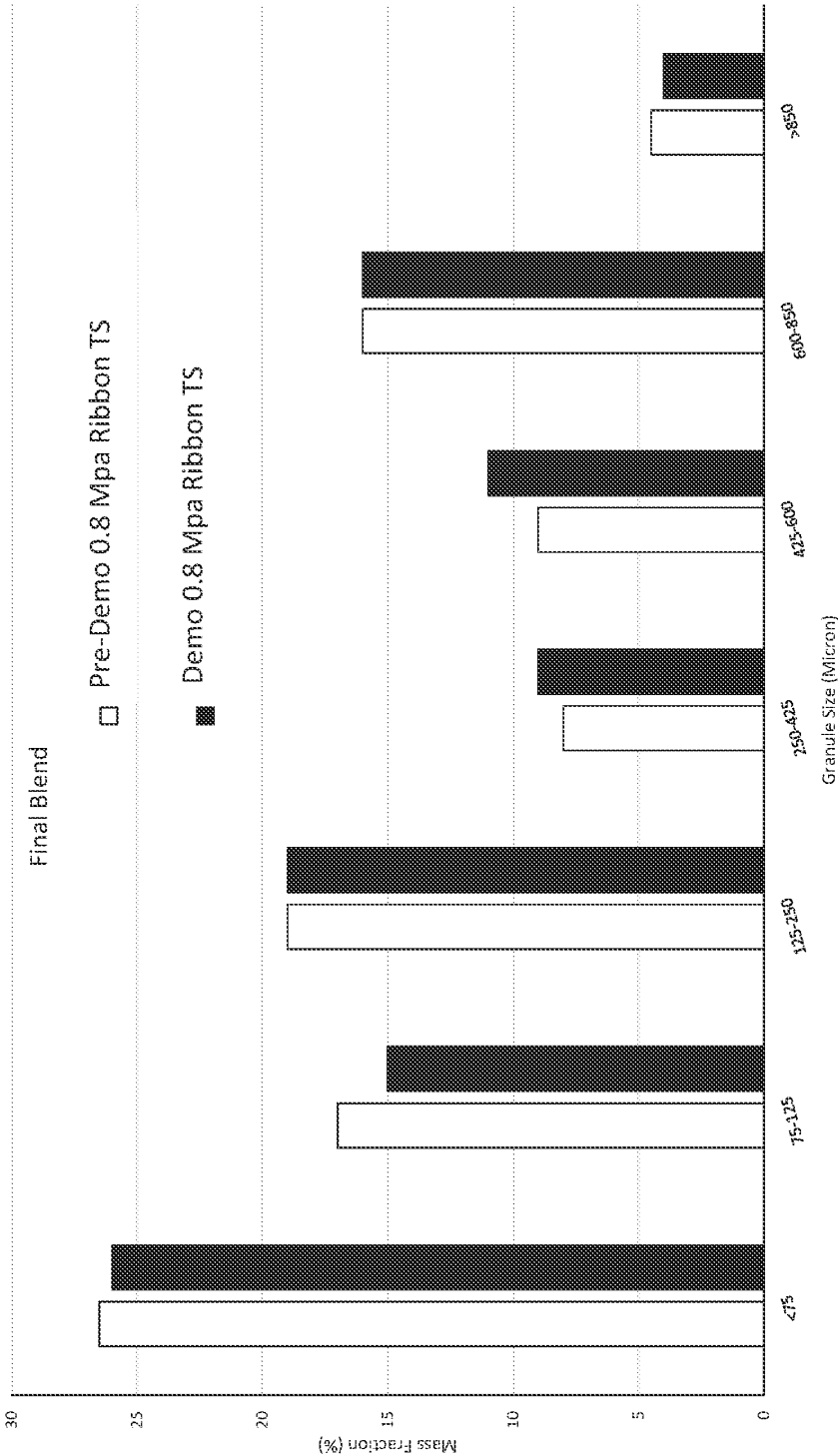


FIG. 33

