Figure 1

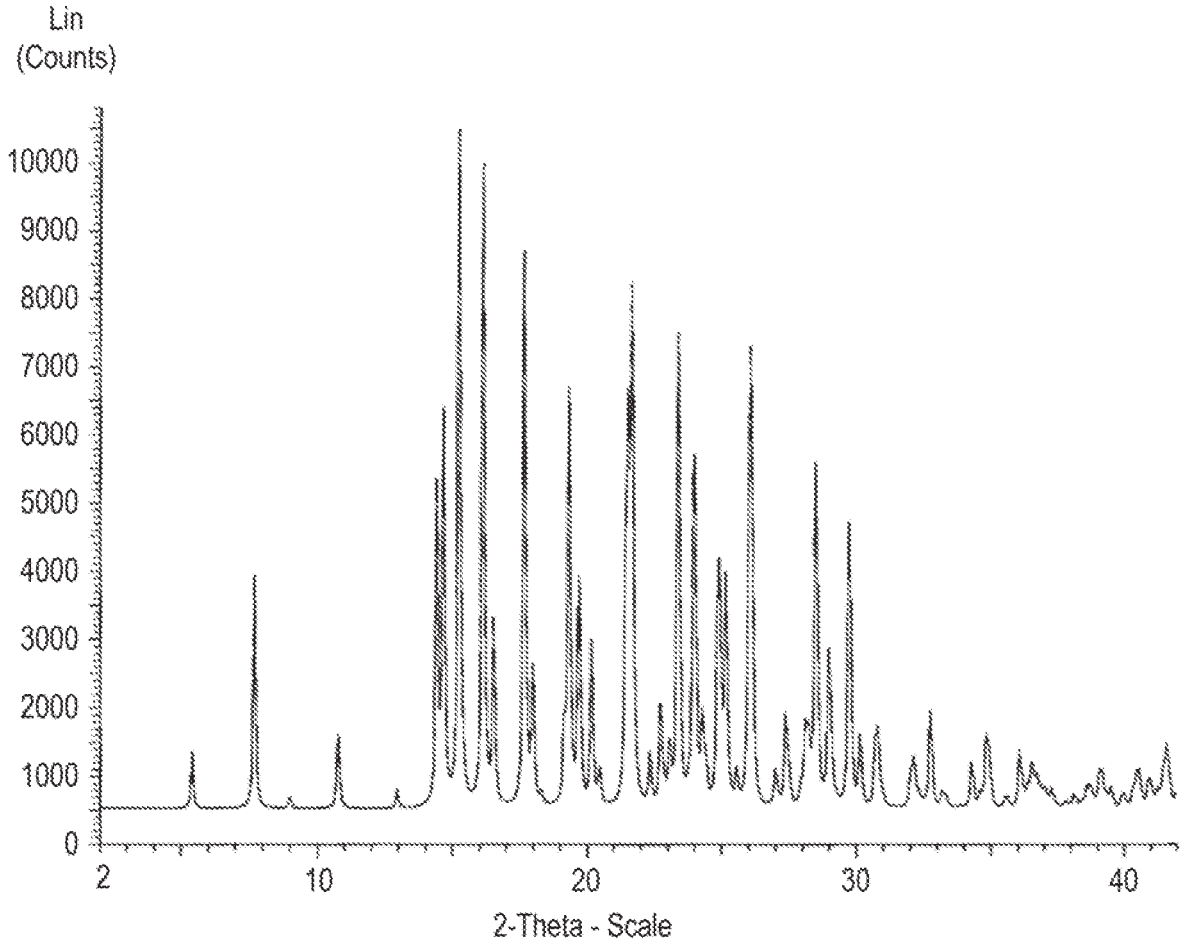

Lin
(Counts)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2
10
20
30
40
2-Theta - Scale

Figure 2

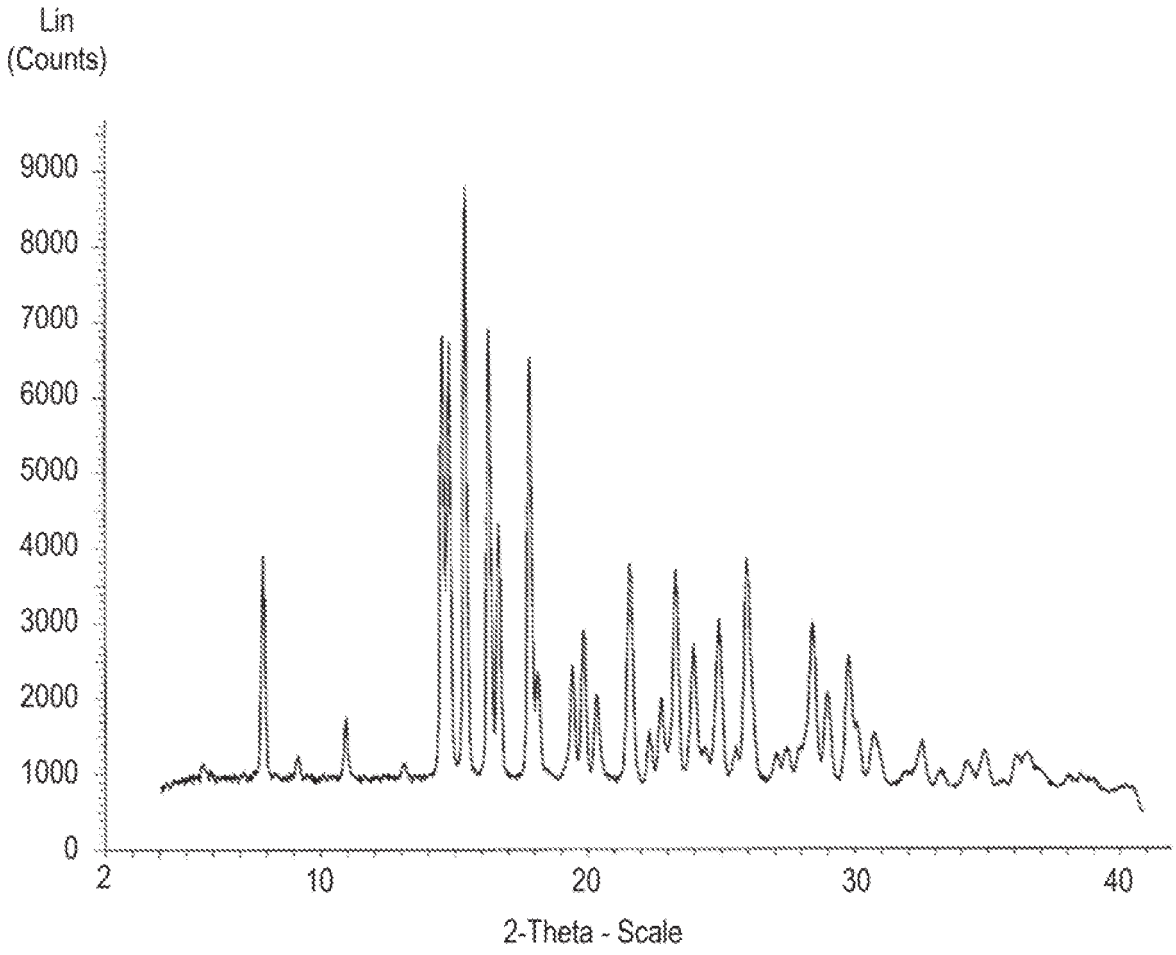

Lin
(Counts)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2
10
20
30
40
2-Theta - Scale

Figure 3

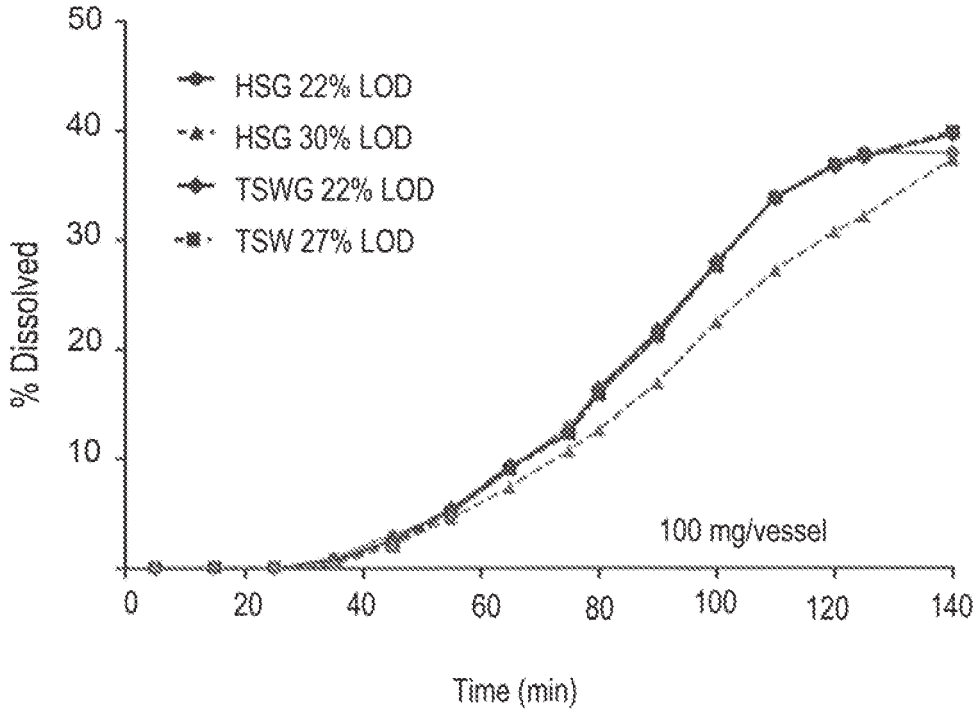

50
40
30
20
10
% Dissolved
HSG 22% LOD
HSG 30% LOD
TSWG 22% LOD
TSW 27% LOD
100 mg/vessel
0
20
40
60
80
100
120
140
Time (min)

Figure 4

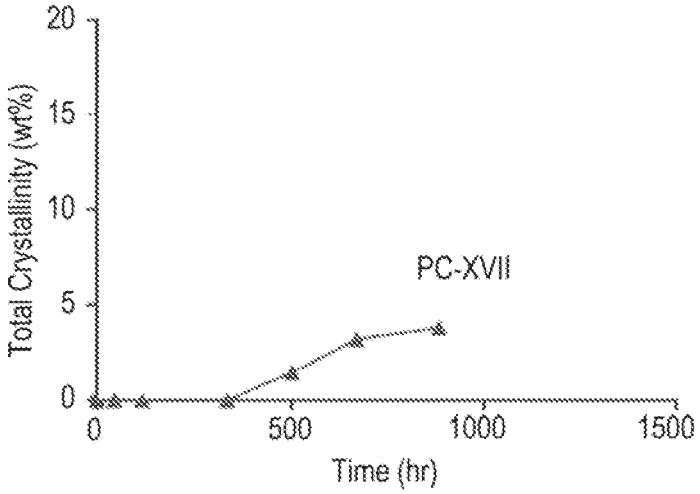

20
15
10
5
0
Total Crystallinity (wt%)
PC-XVII
0
500
1000
1500
Time (hr)

Figure 5

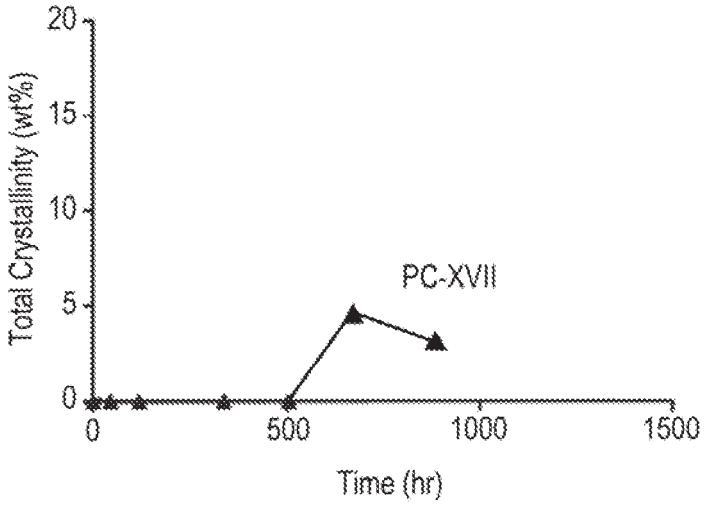

20
15
10
5
0
Total Crystallinity (wt%)
PC-XVII
0
500
1000
1500
Time (hr)

Figure 6

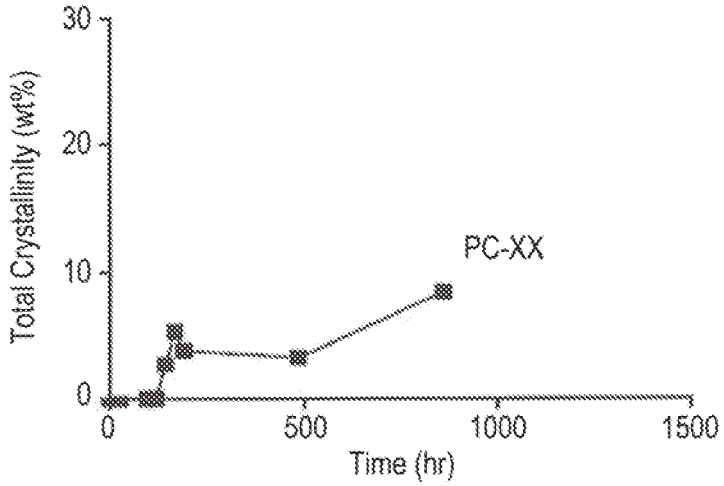


Figure 7

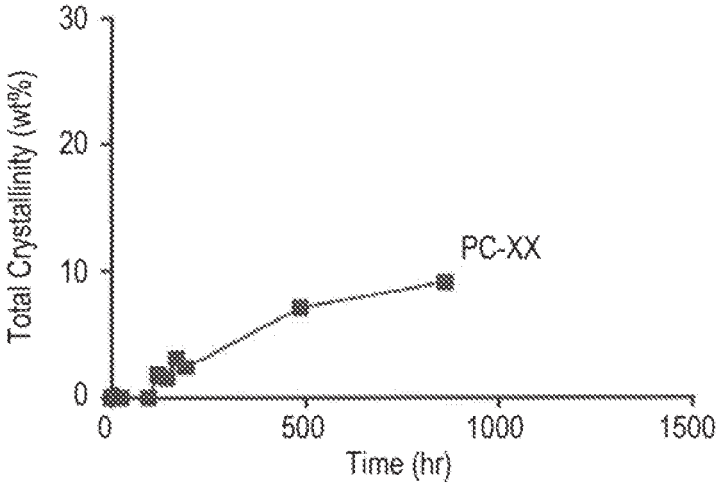


Figure 8

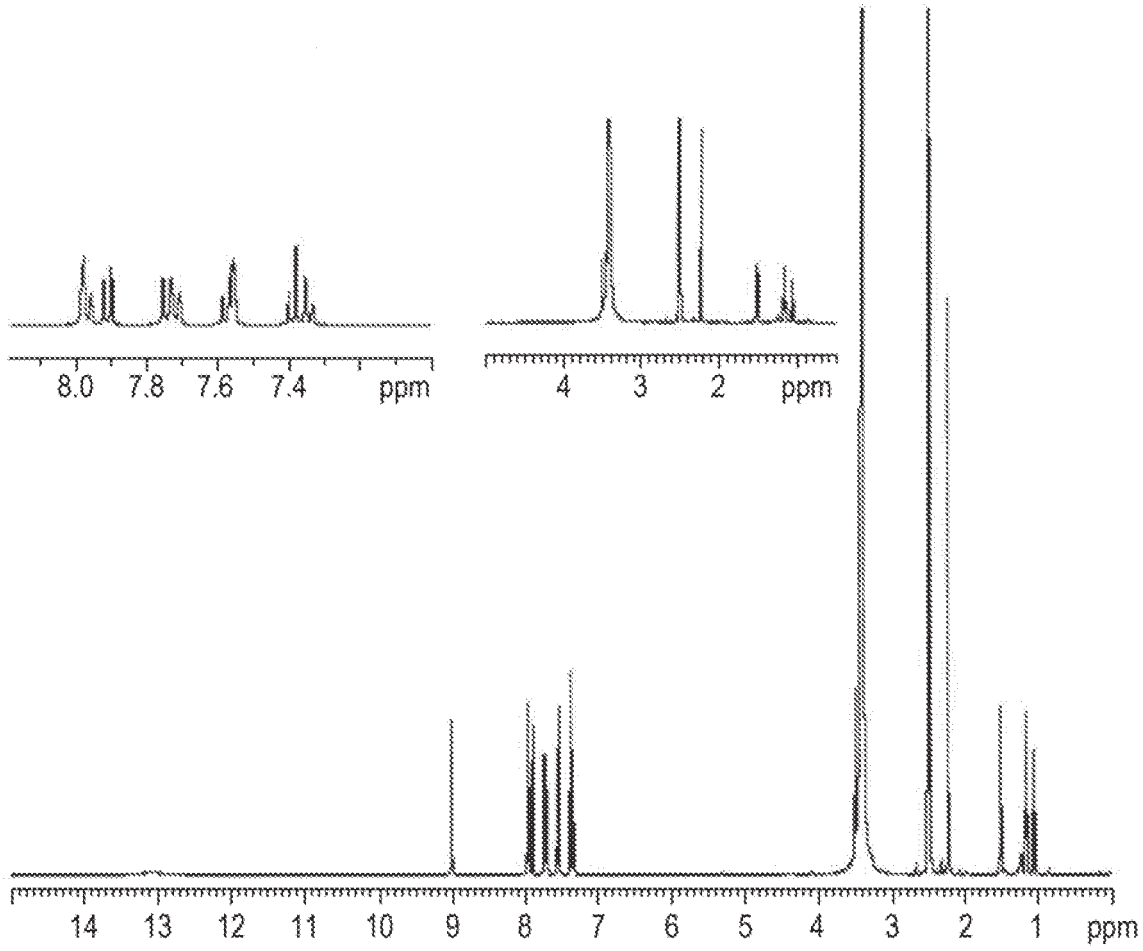


Figure 9

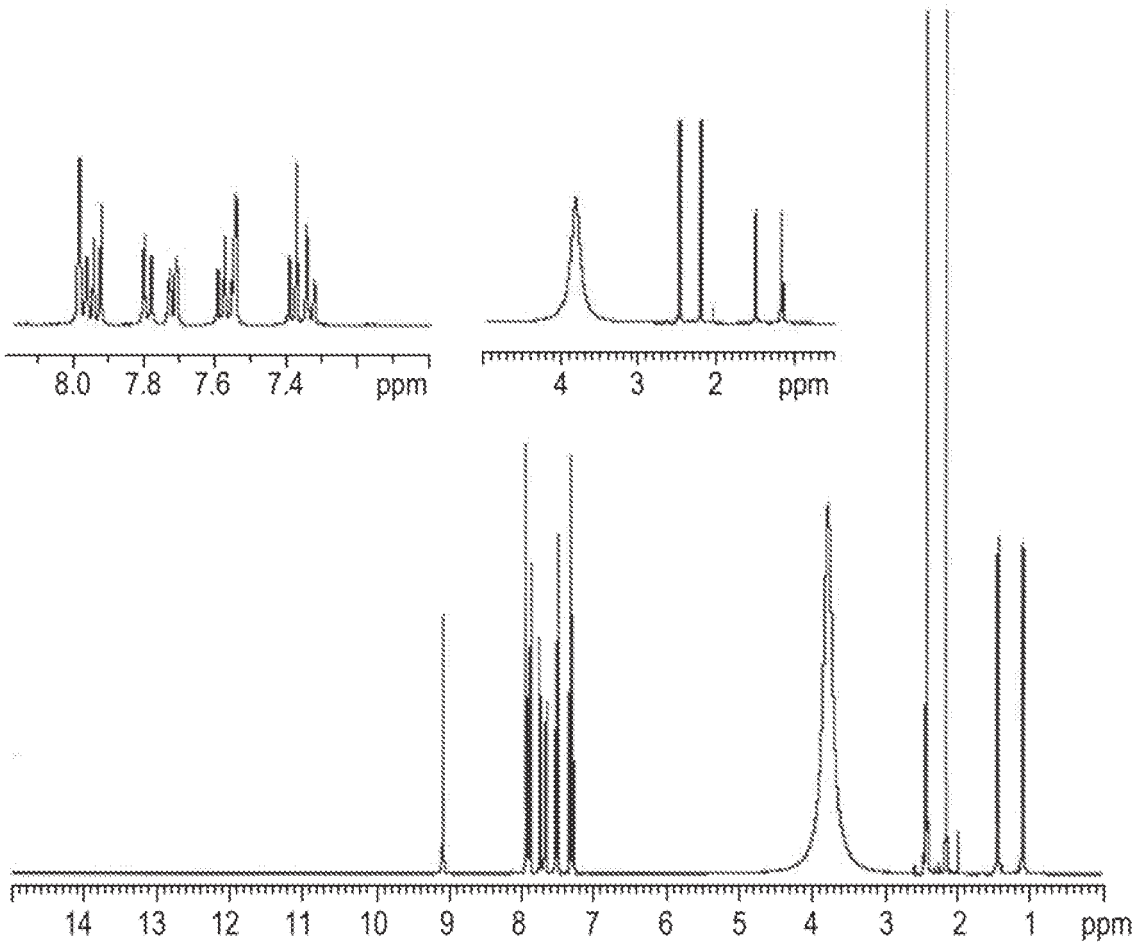


Figure 10

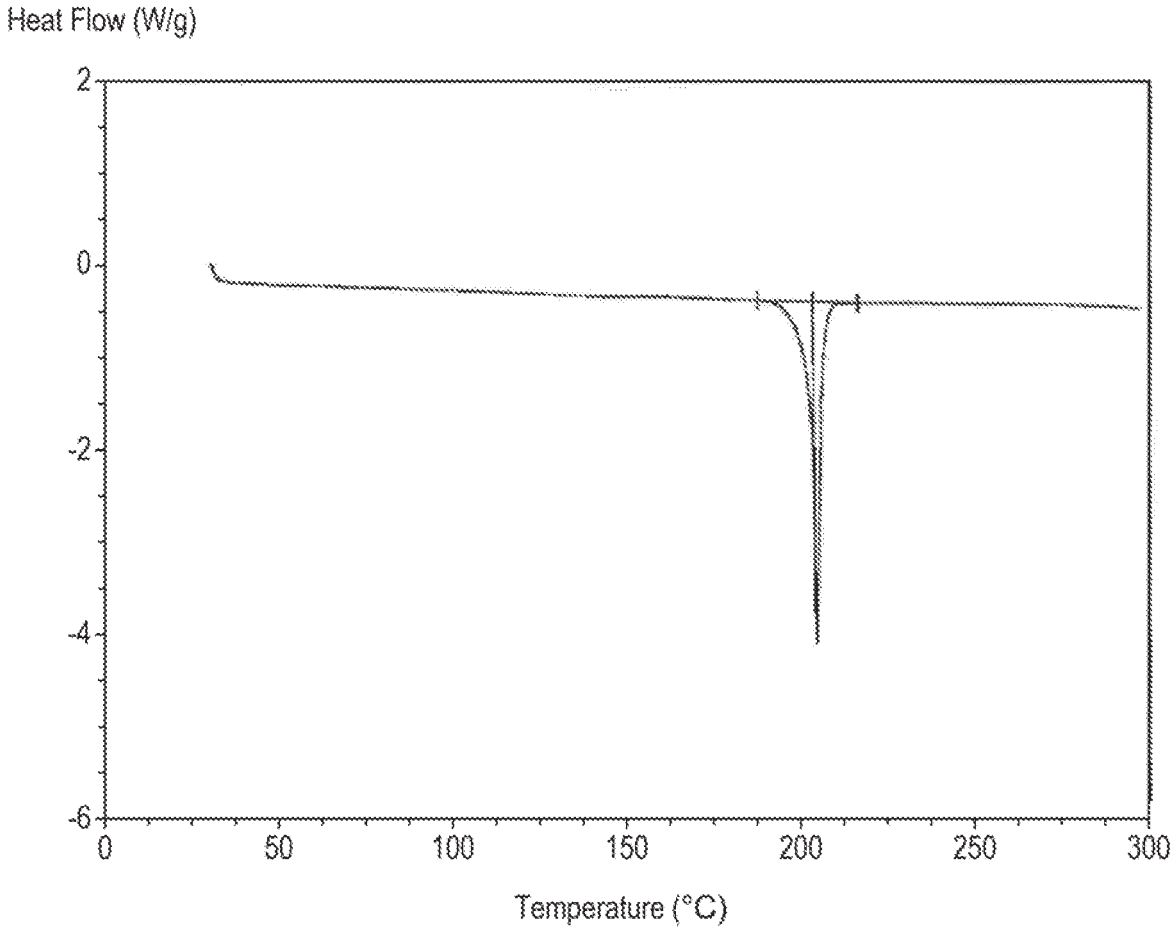


Figure 11

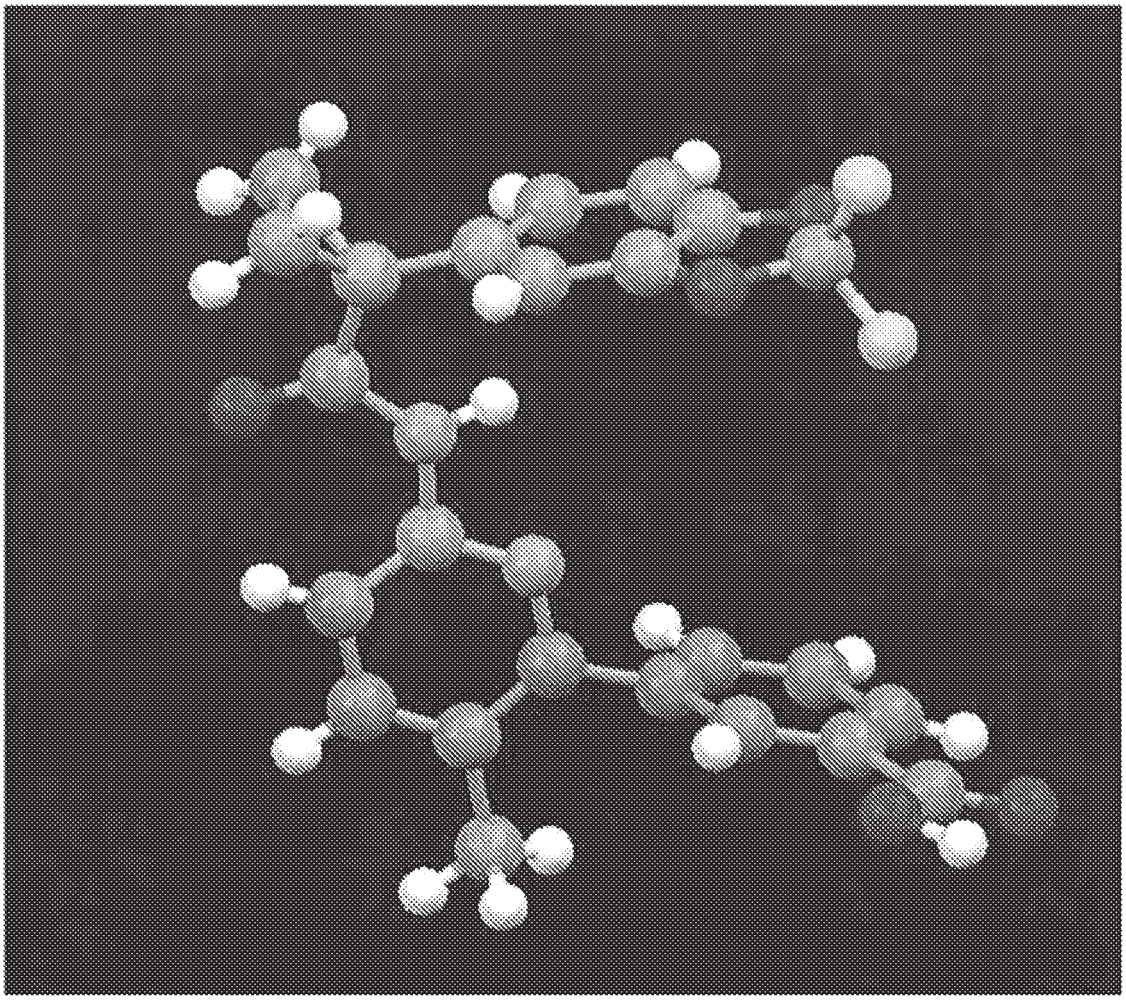


Figure 12

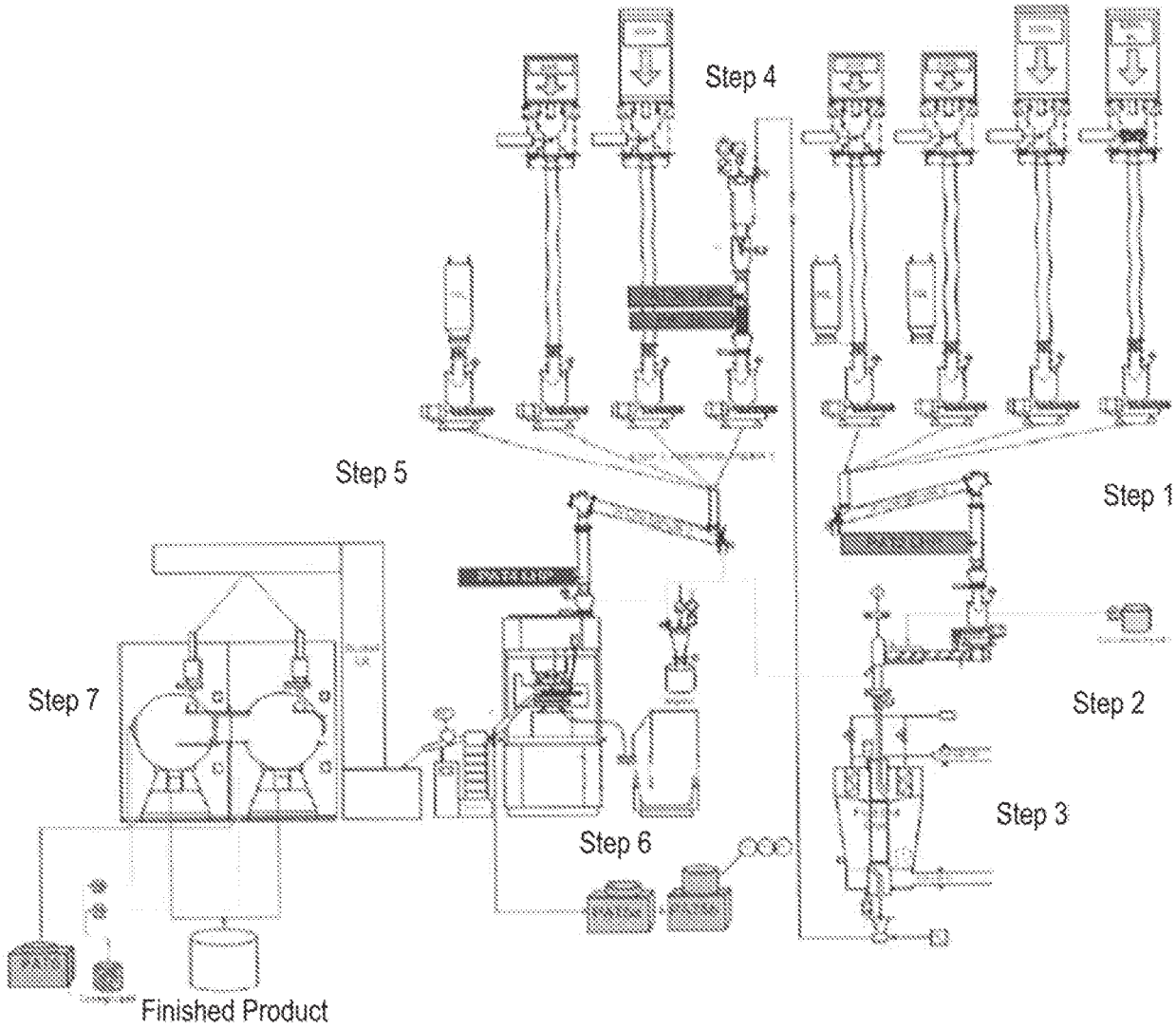
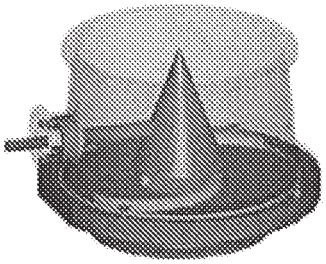

Step 4
Step 5
Step 1
Step 7
Step 2
Step 3
Step 6
Finished Product

Figure 13



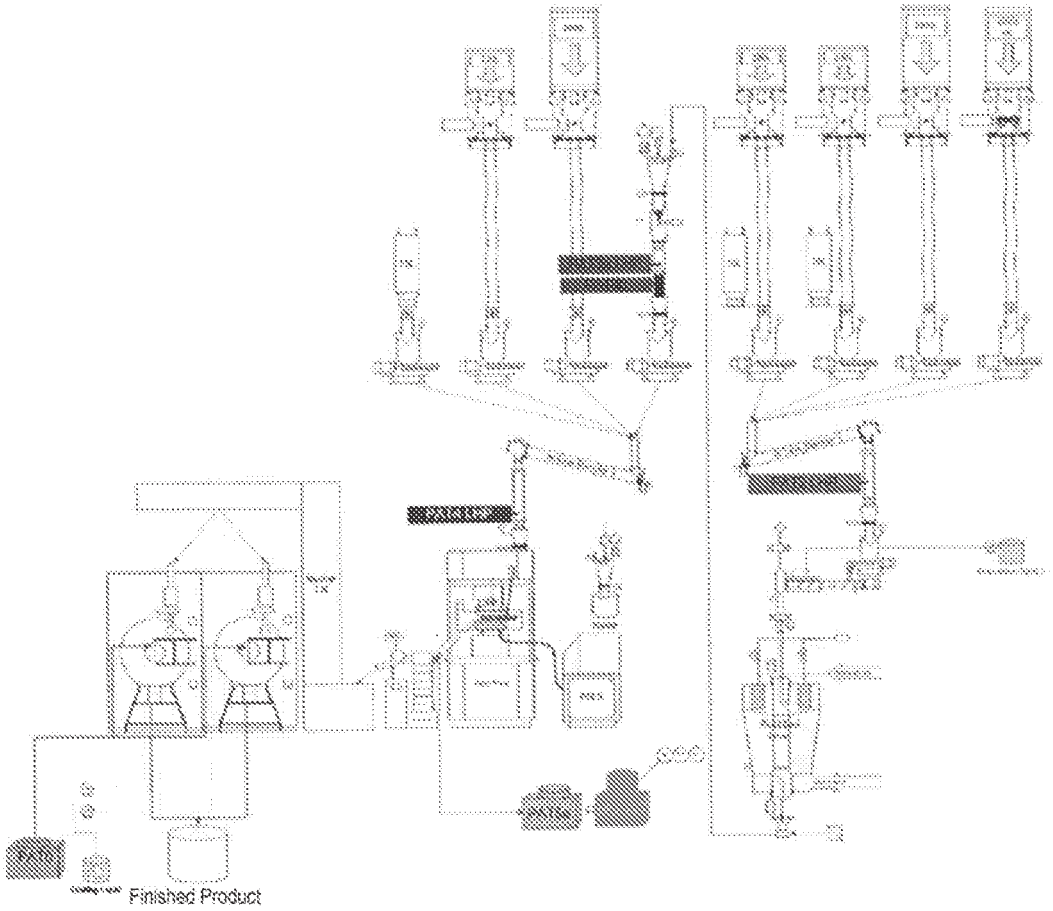


Figure 14

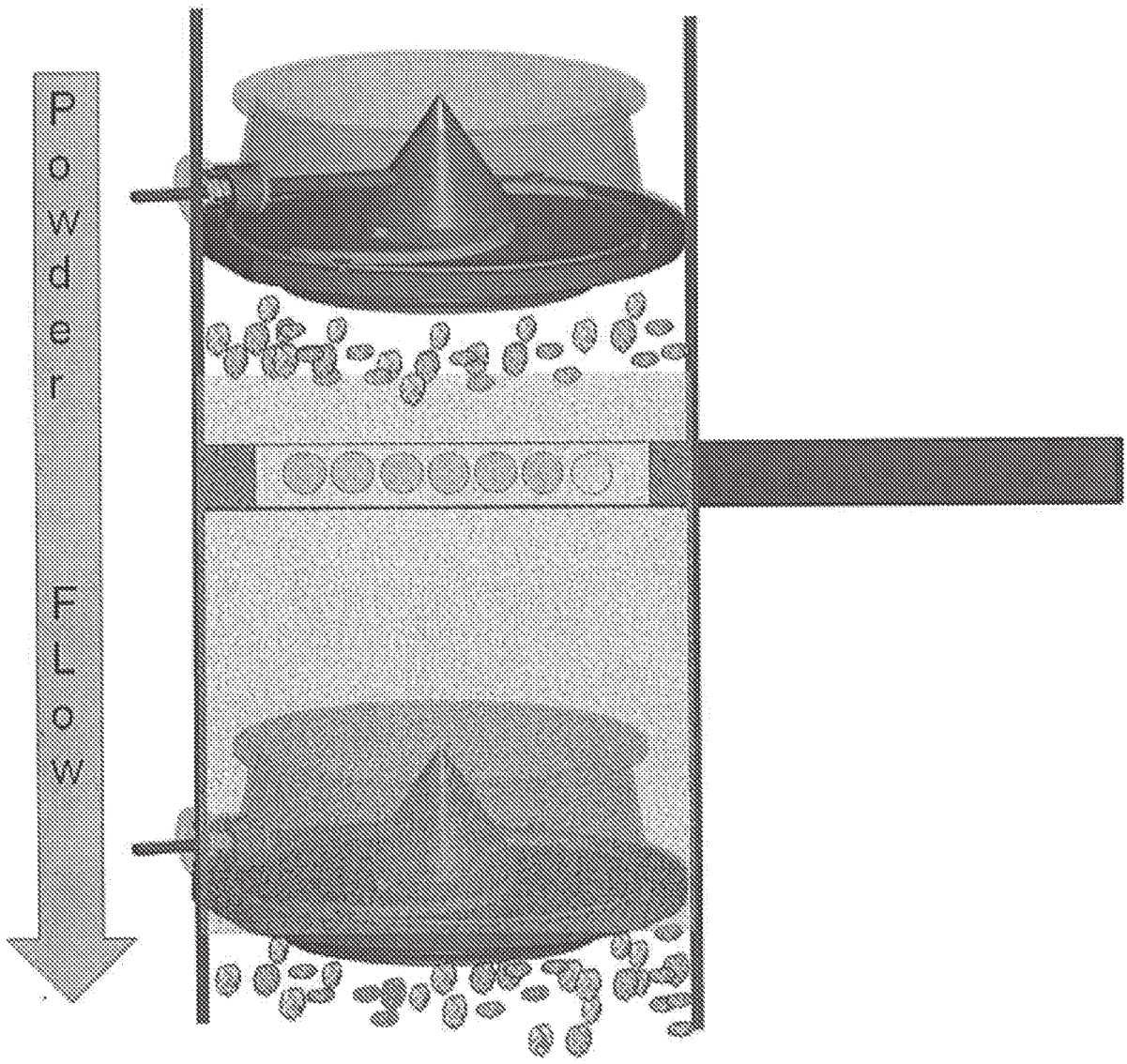


Figure 15

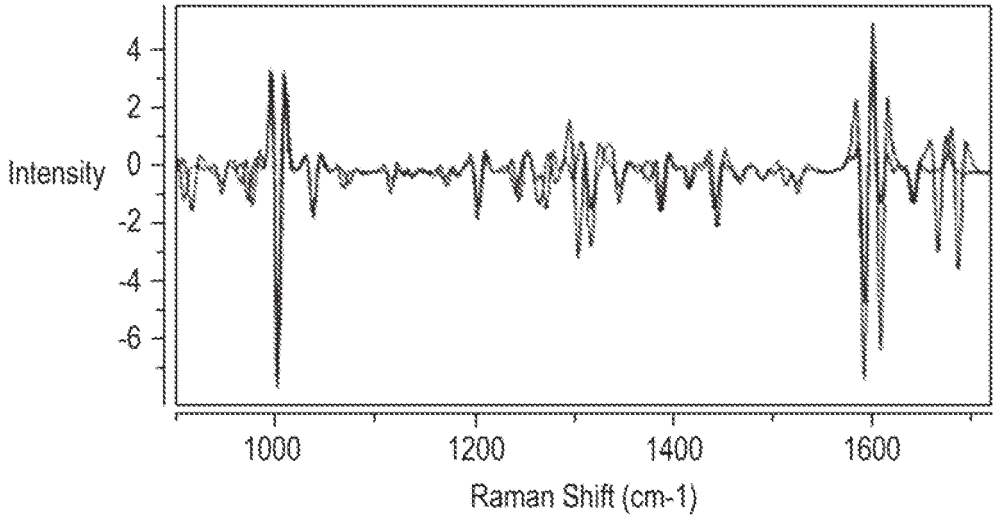

4
2
Intensity 0
-2
-4
-6
1000
1200
1400
1600
Raman Shift (cm-1)
Compound 1 Form I Processed
Compound 1 Form II Processed

Figure 16

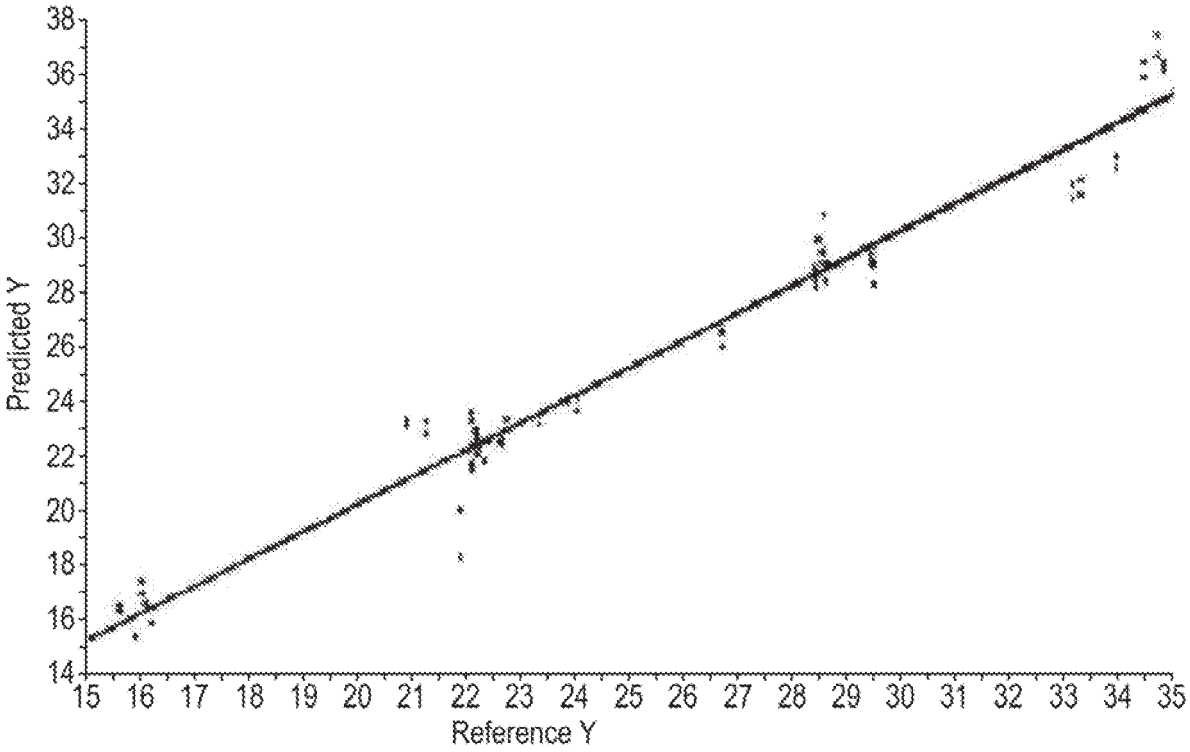

Predicted Y
38
36
34
32
30
28
26
24
22
20
18
16
14
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
Reference Y

Figure 17

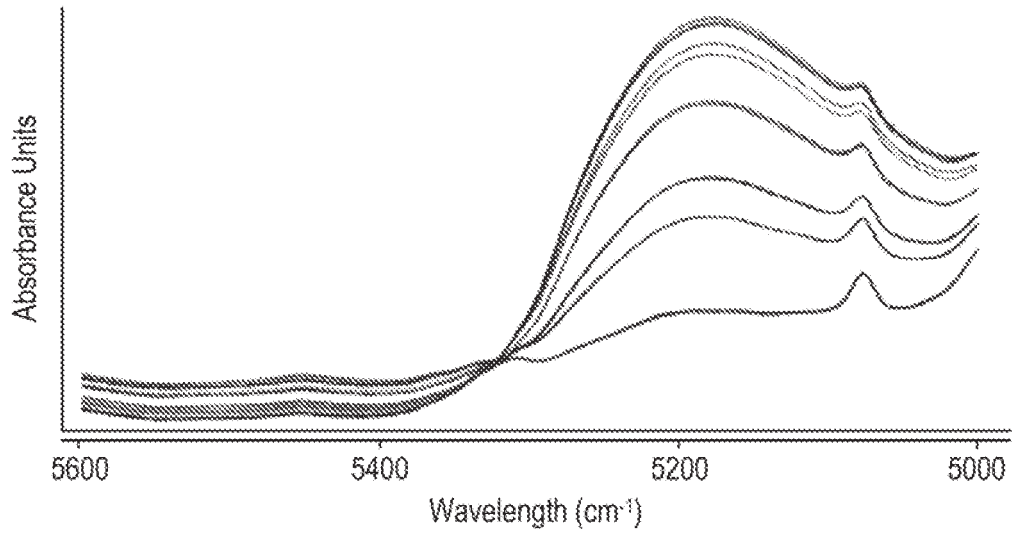


Figure 18

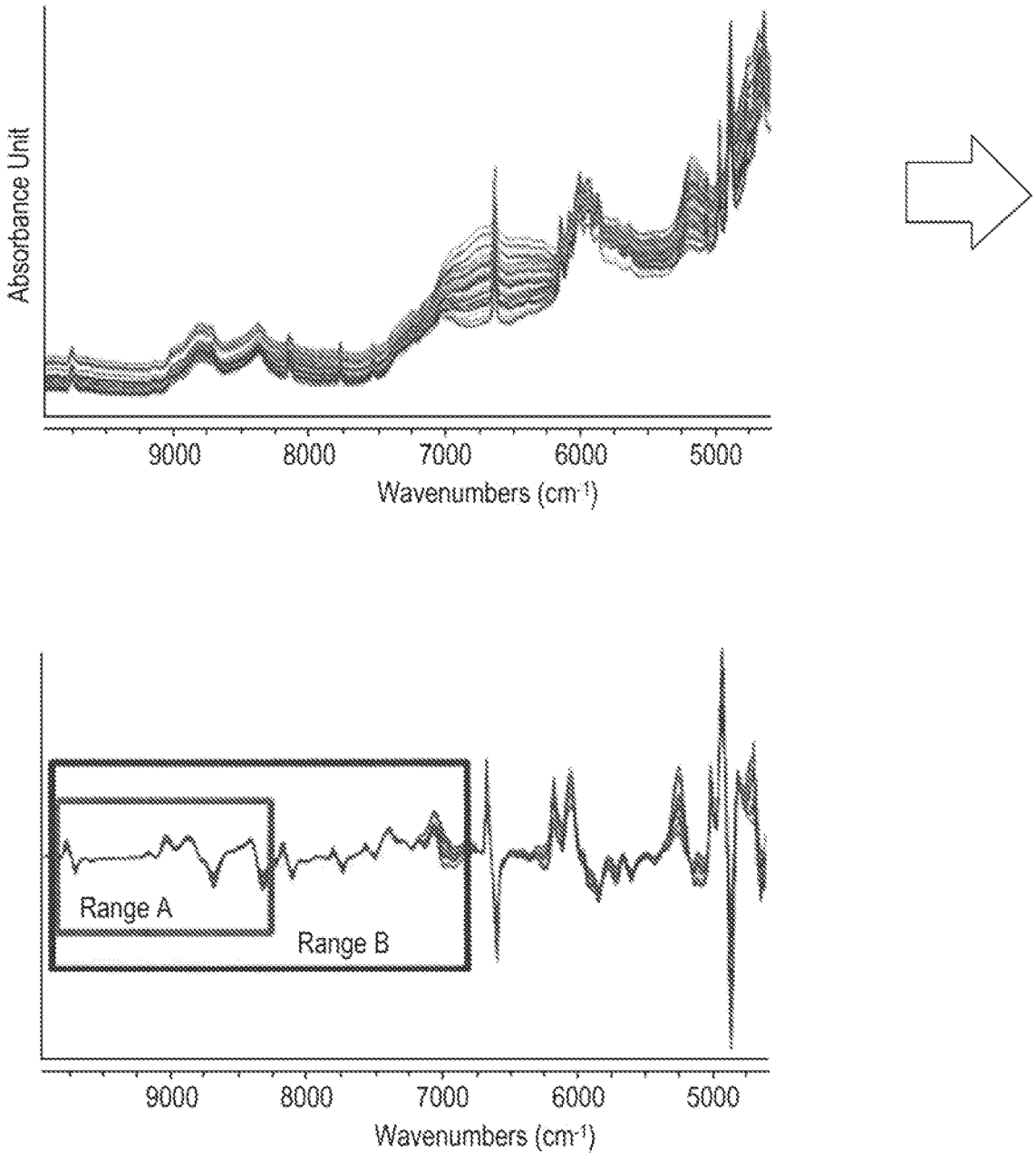

Absorbance Unit
9000
8000
7000
6000
5000
Wavenumbers (cm-1)
Range A
Range B
9000
8000
7000
6000
5000
Wavenumbers (cm-1)

Figure 19

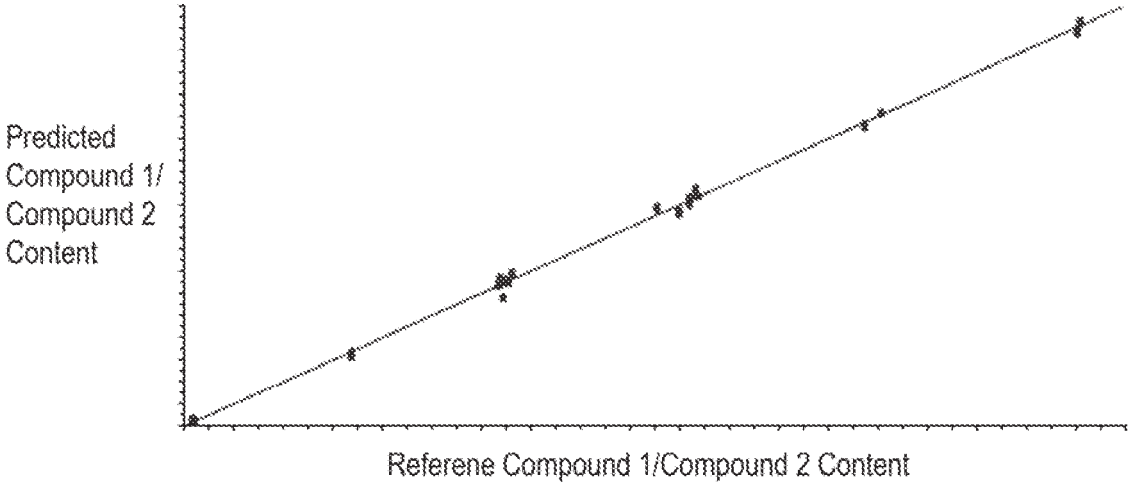

Predicted
Compound 1/
Compound 2
Content
Referene Compound 1/Compound 2 Content

Figure 20

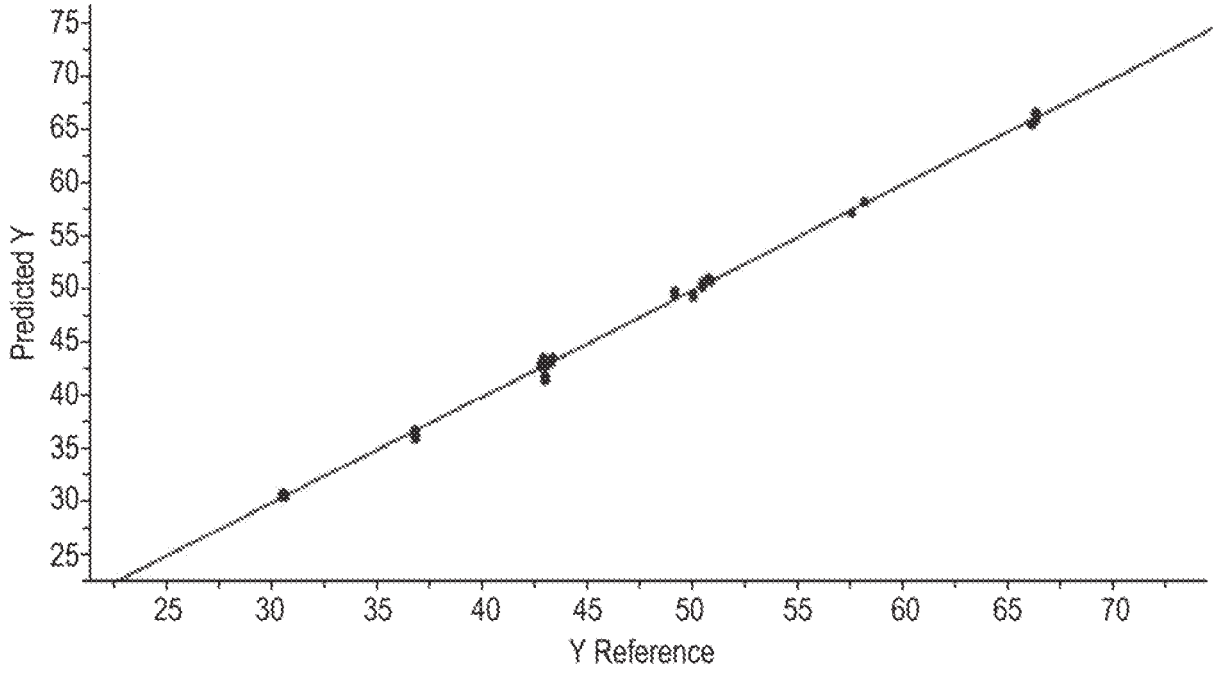

Predicted Y
75
70
65
60
55
50
45
40
35
30
25
25
30
35
40
45
50
55
60
65
70
Y Reference

Figure 21

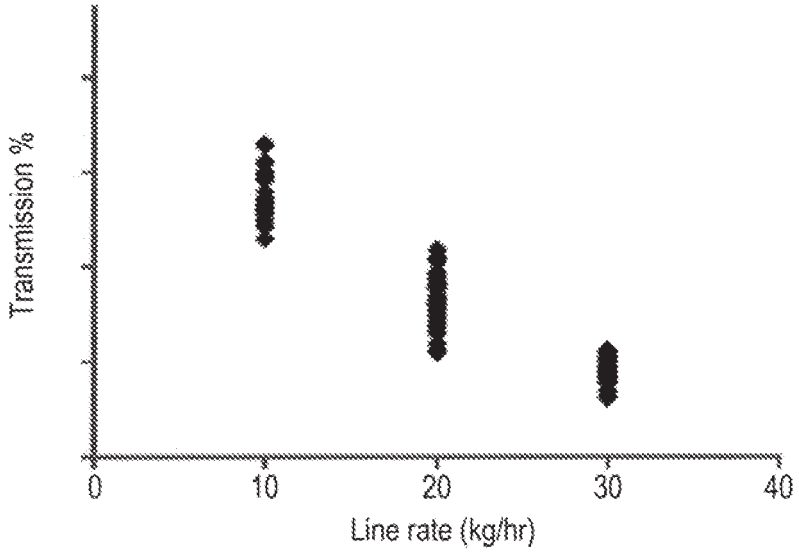


Figure 22

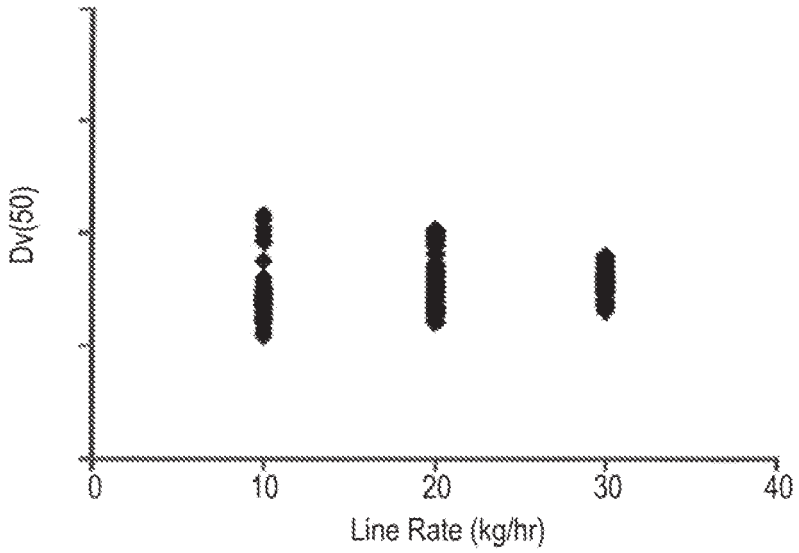


Figure 23

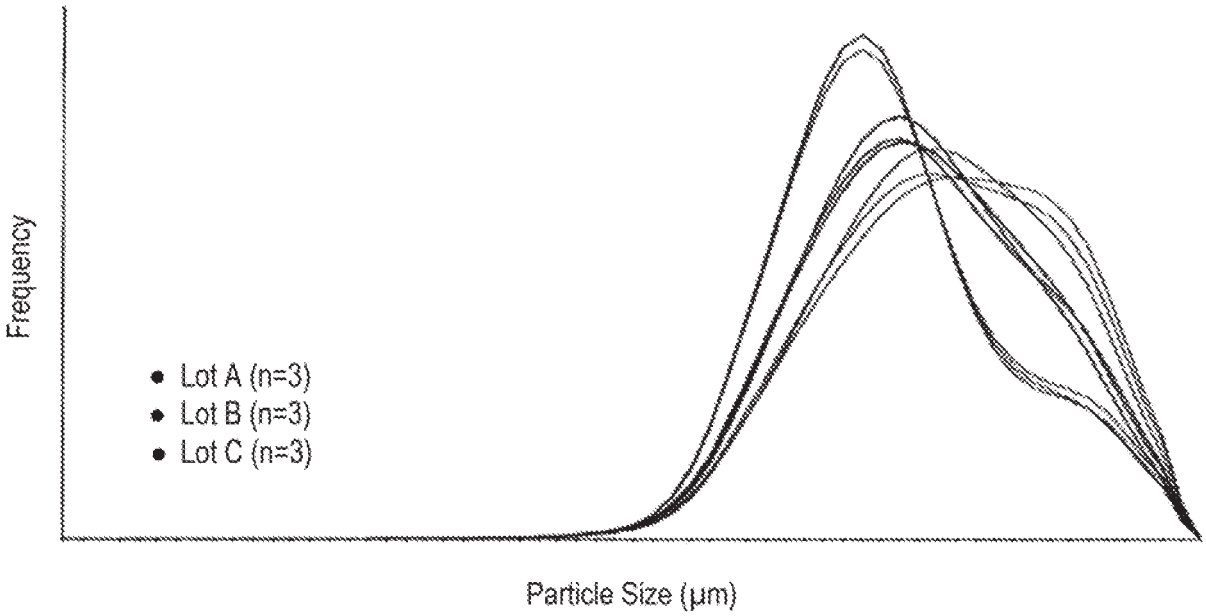


Figure 24

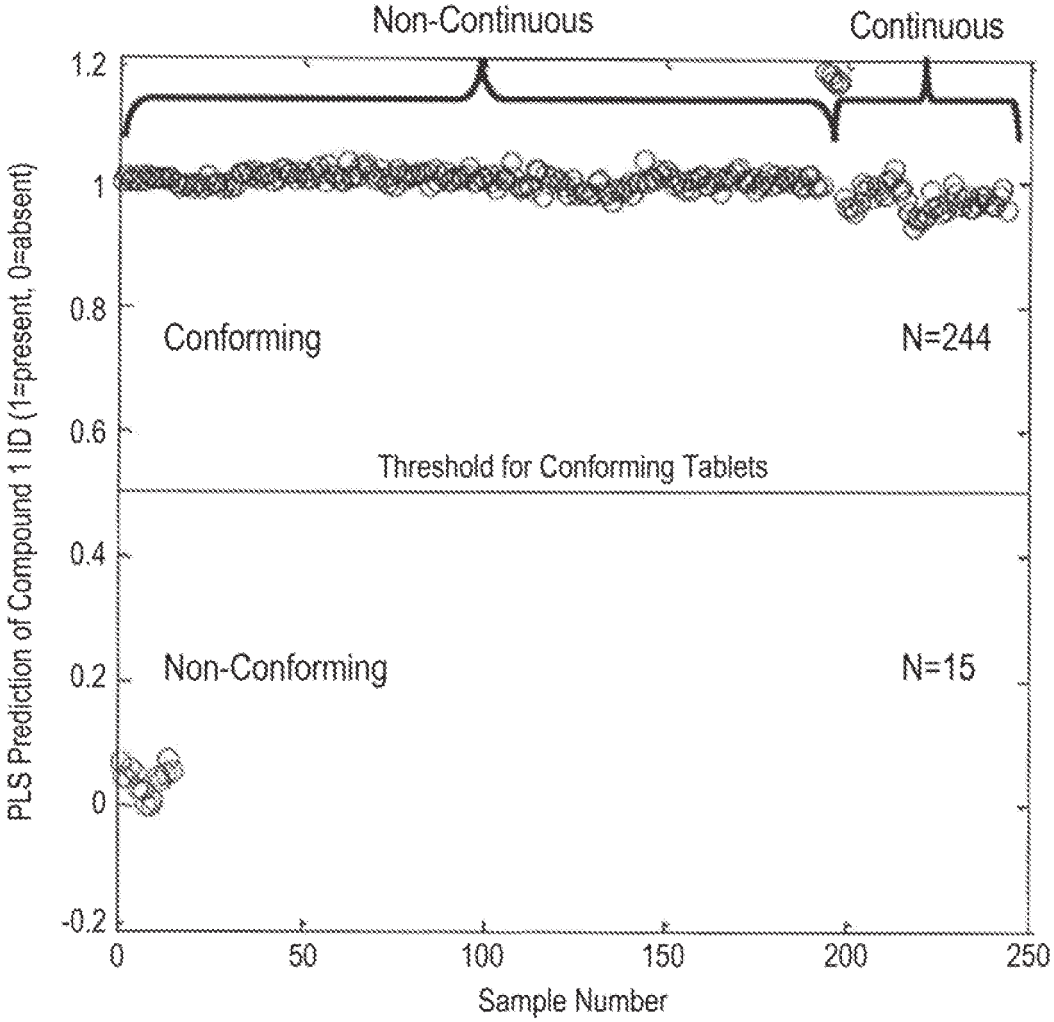
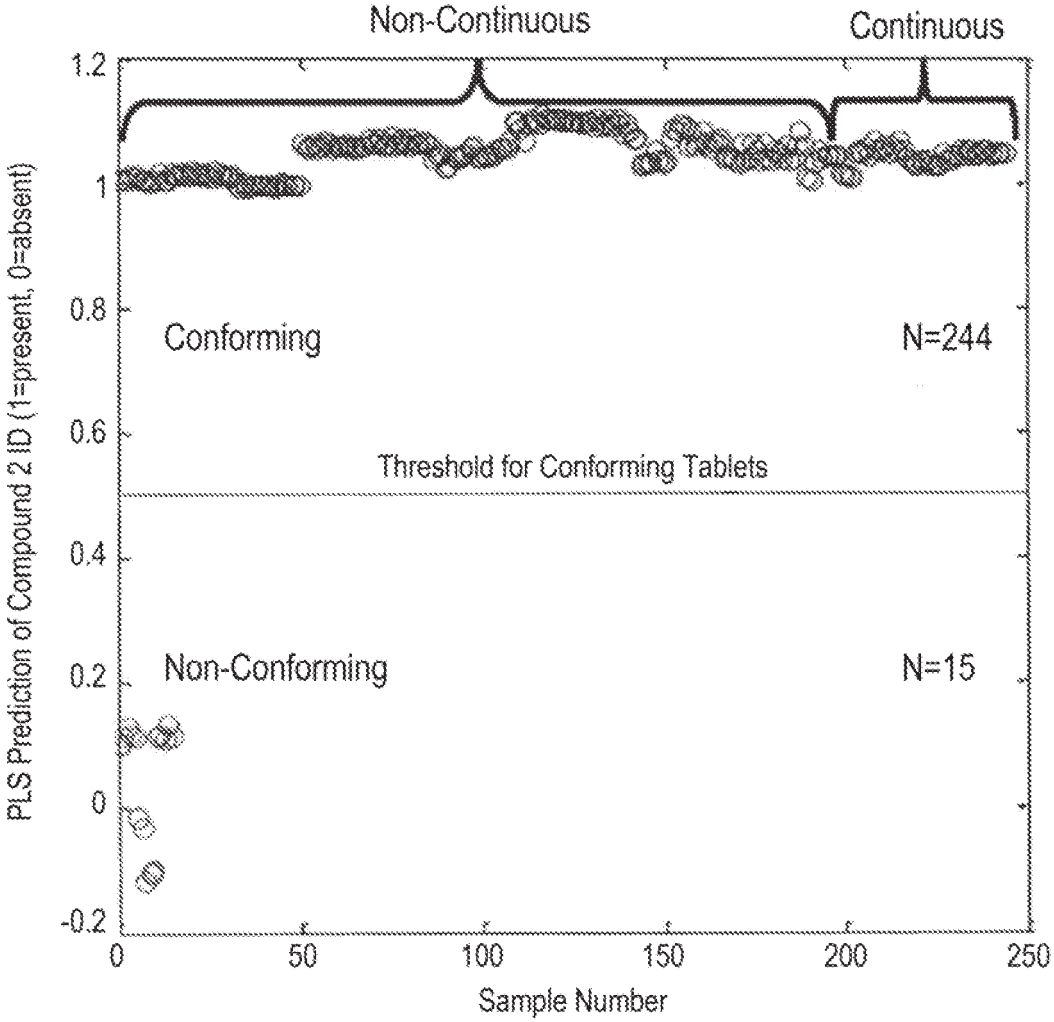

Non-Continuous
Continuous
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
PLS Prediction of Compound 1 ID (1=present, 0=absent)
Conforming
N=244
Threshold for Conforming Tablets
Non-Conforming
N=15
0
50
100
150
200
250
Sample Number

Figure 25


Non-Continuous
Continuous
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
Conforming
N=244
Threshold for Conforming Tablets
Non-Conforming
N=15
PLS Prediction of Compound 2 ID (1=present, 0=absent)
0
50
100
150
200
250
Sample Number