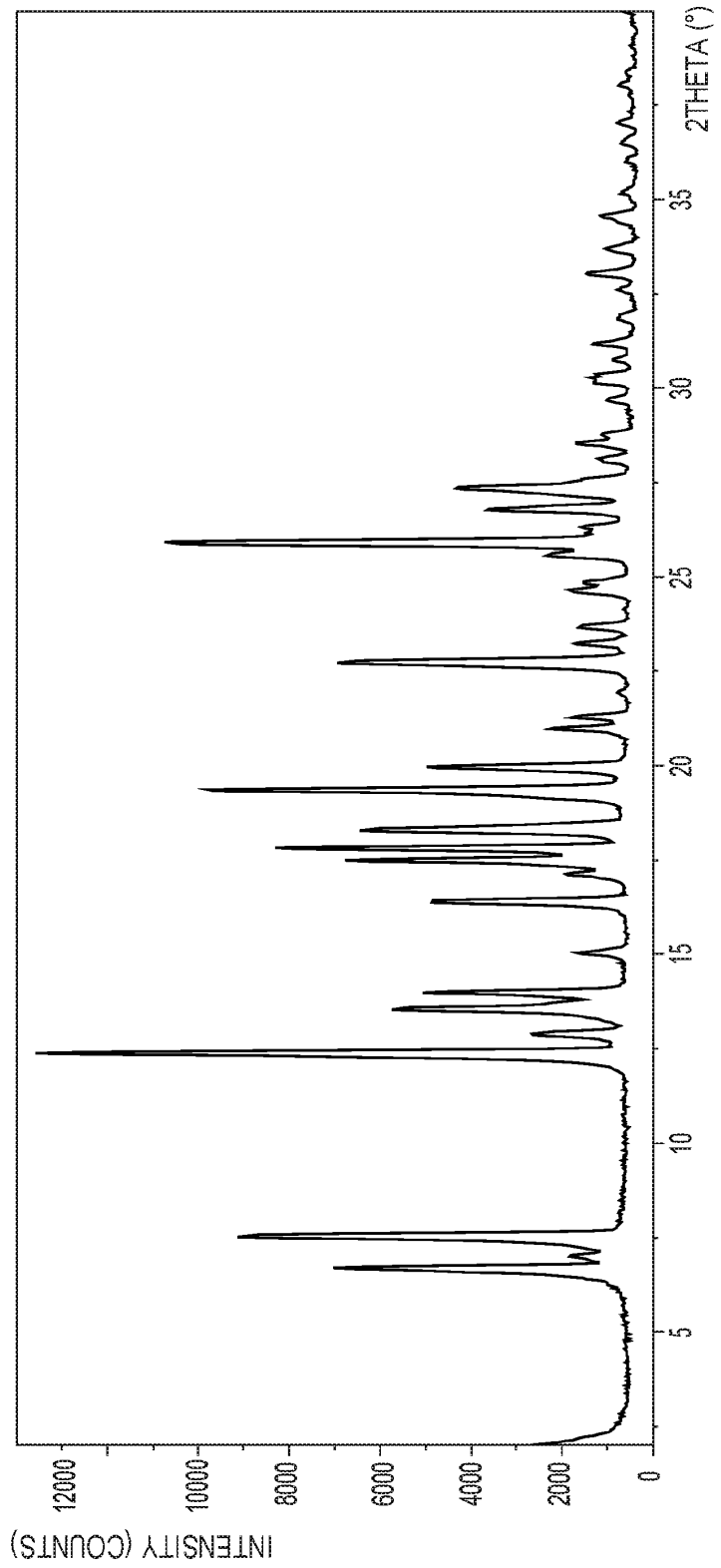
INTENSITY (COUNTS)
12000
10000
8000
6000
4000
2000
0
5
10
15
20
25
30
35
2THETA (°)

FIG. 1

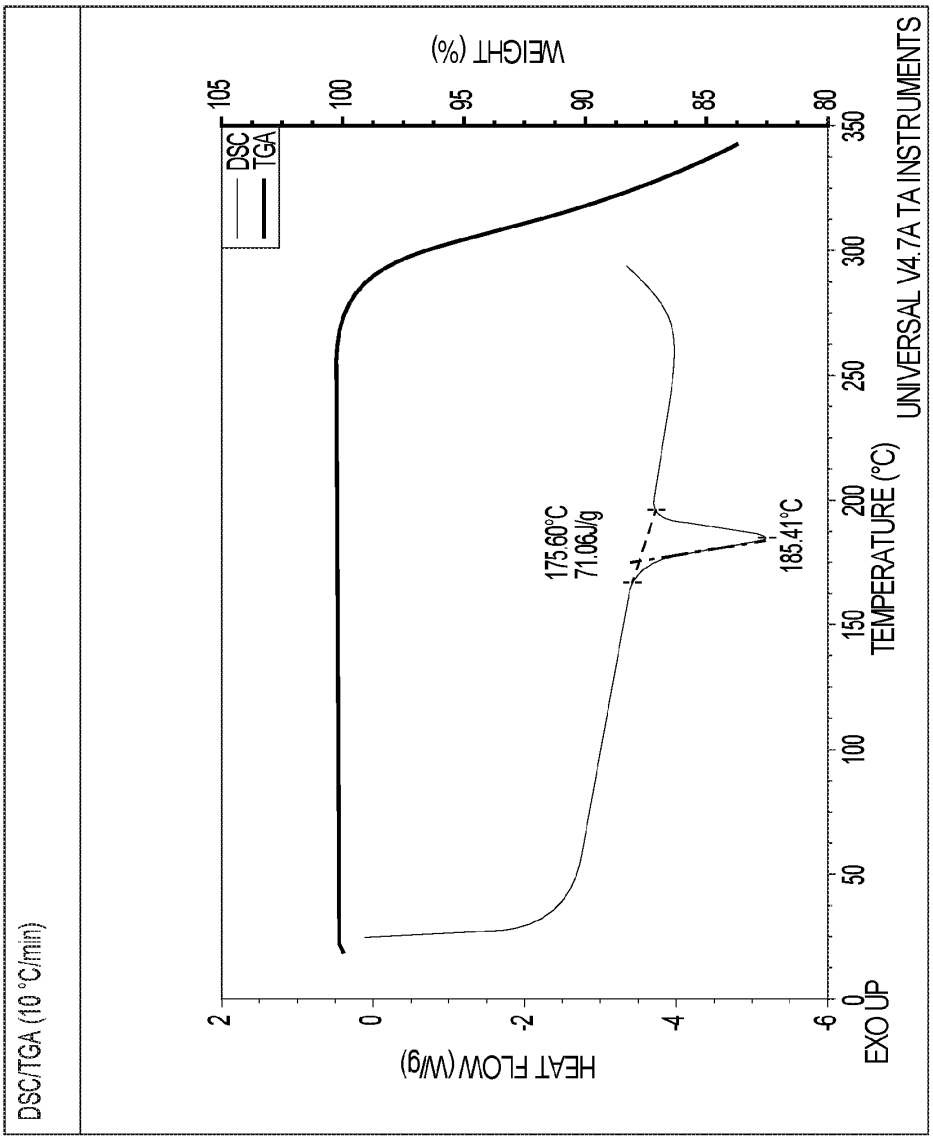
DSC/TGA (10 °C/min)
DSC
TGA
WEIGHT (%)
105
100
95
90
85
80
2
0
-2
-4
-6
HEAT FLOW (W/g)
EXO UP
0
50
100
150
200
250
300
350
TEMPERATURE (°C)
175.60°C
71.06J/g
185.41°C
UNIVERSAL V4.7A TA INSTRUMENTS

FIG. 2

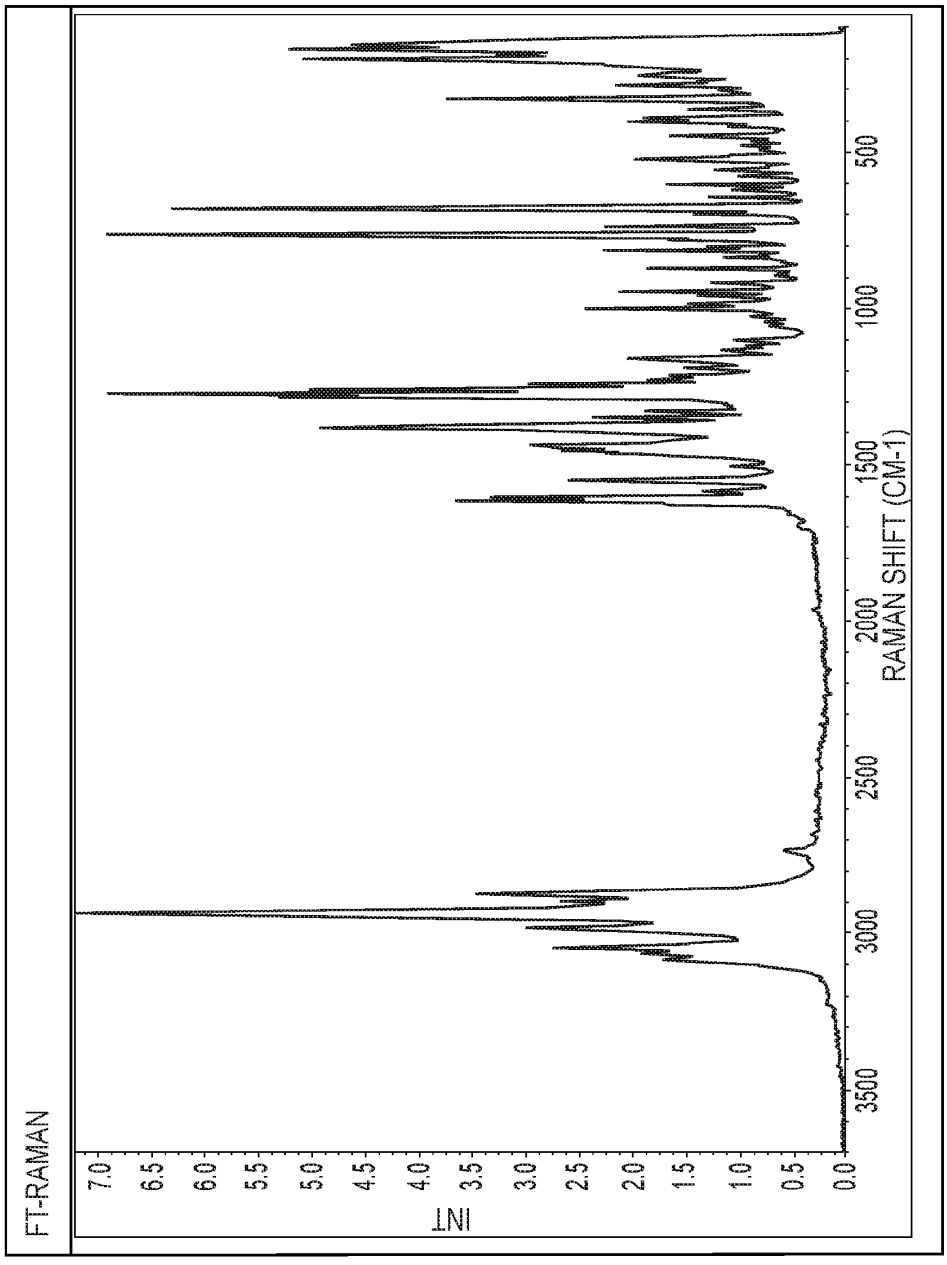
FT-RAMAN
INT
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
3500
3000
2500
2000
1500
1000
500
RAMAN SHIFT (CM-1)

FIG. 3

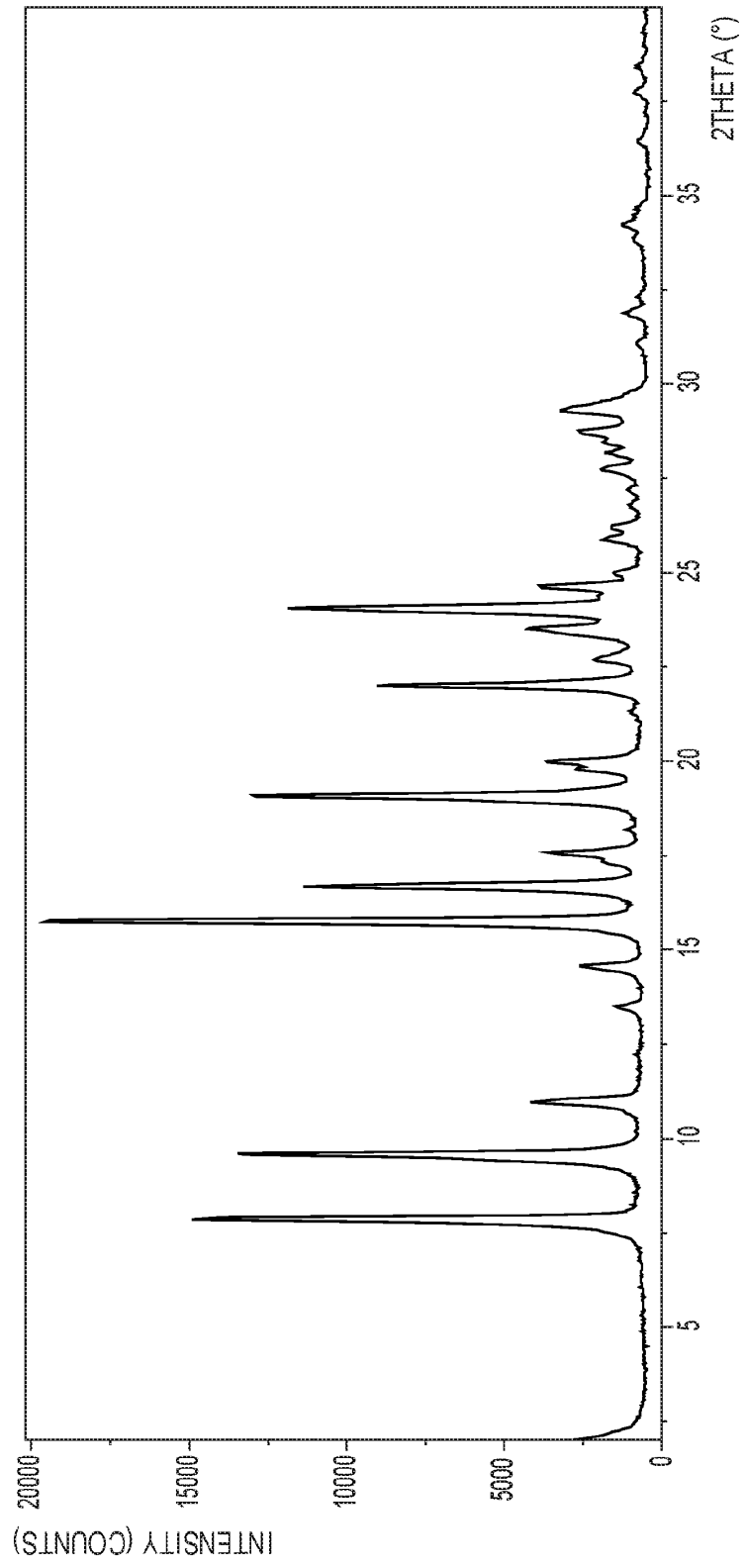
INTENSITY (COUNTS)
20000
15000
10000
5000
0
5
10
15
20
25
30
35
2THETA (°)

FIG. 4

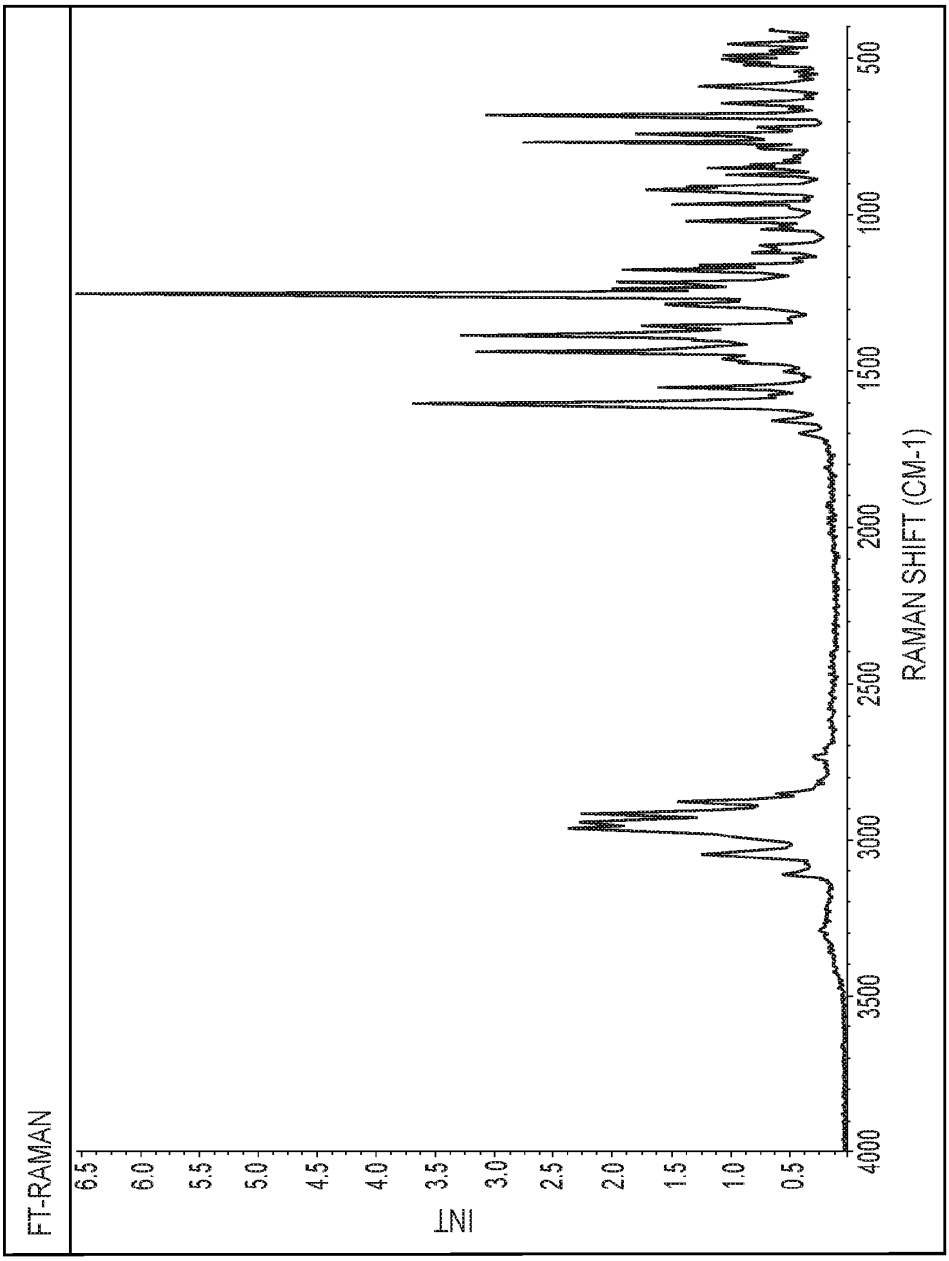
FT-RAMAN
INT
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
4000
3500
3000
2500
2000
1500
1000
500
RAMAN SHIFT (CM-1)

FIG. 5

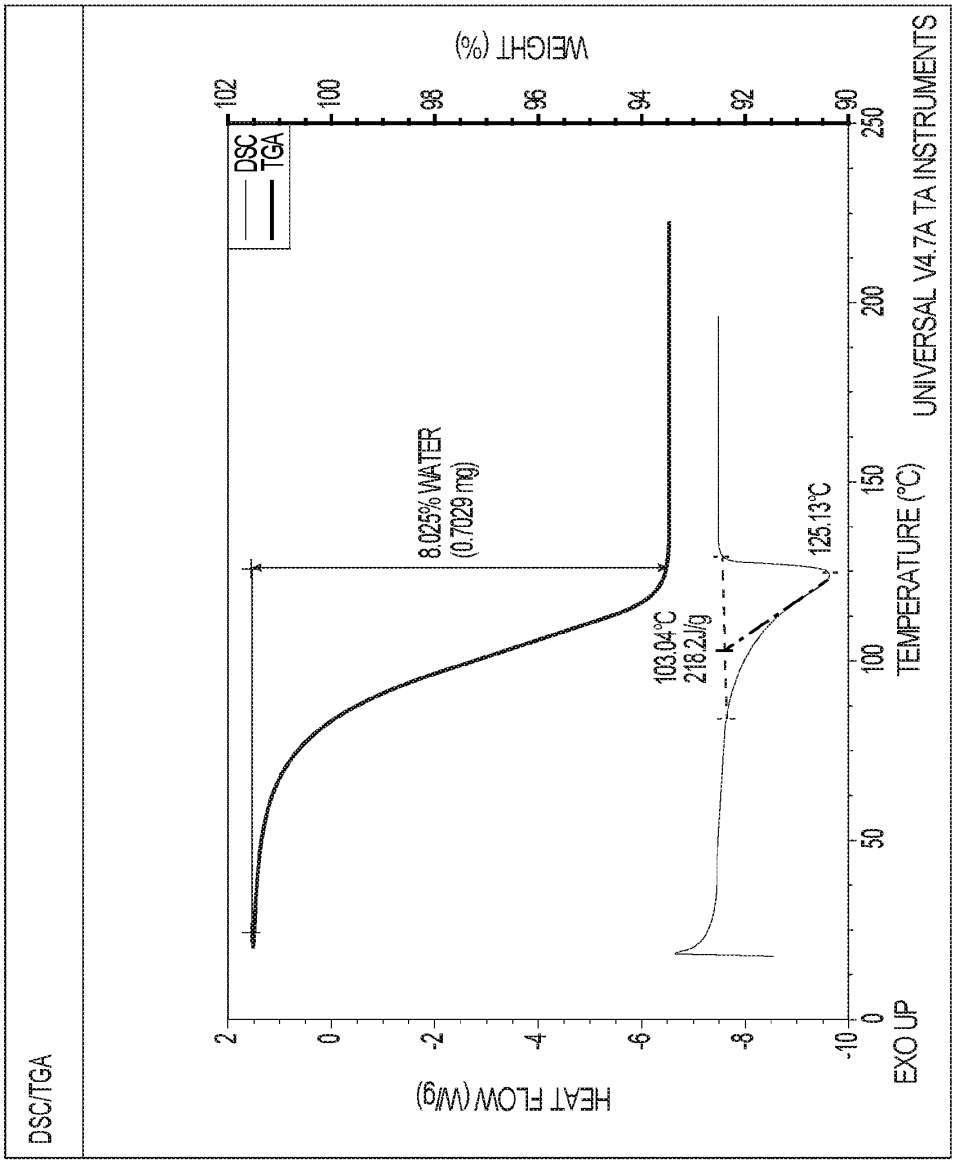
DSC/TGA
DSC
TGA
8.025% WATER
(0.7029 mg)
103.04°C
218.2J/g
125.13°C
HEAT FLOW (W/g)
WEIGHT (%)
TEMPERATURE (°C)
EXO UP
UNIVERSAL V4.7A TA INSTRUMENTS

FIG. 6

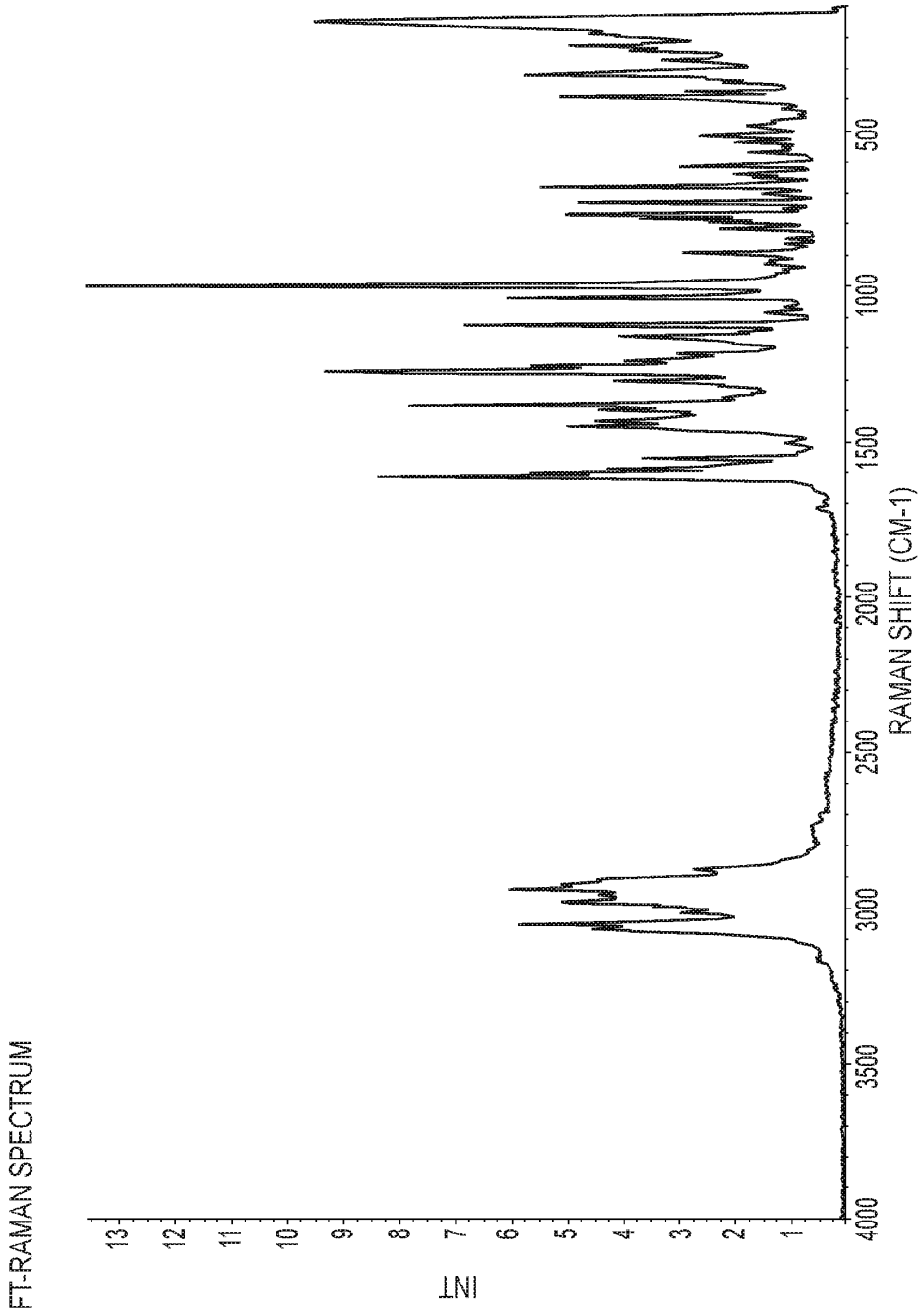
FT-RAMAN SPECTRUM
INT
13
12
11
10
9
8
7
6
5
4
3
2
1
4000
3500
3000
2500
2000
1500
1000
500
RAMAN SHIFT (CM-1)

FIG. 7

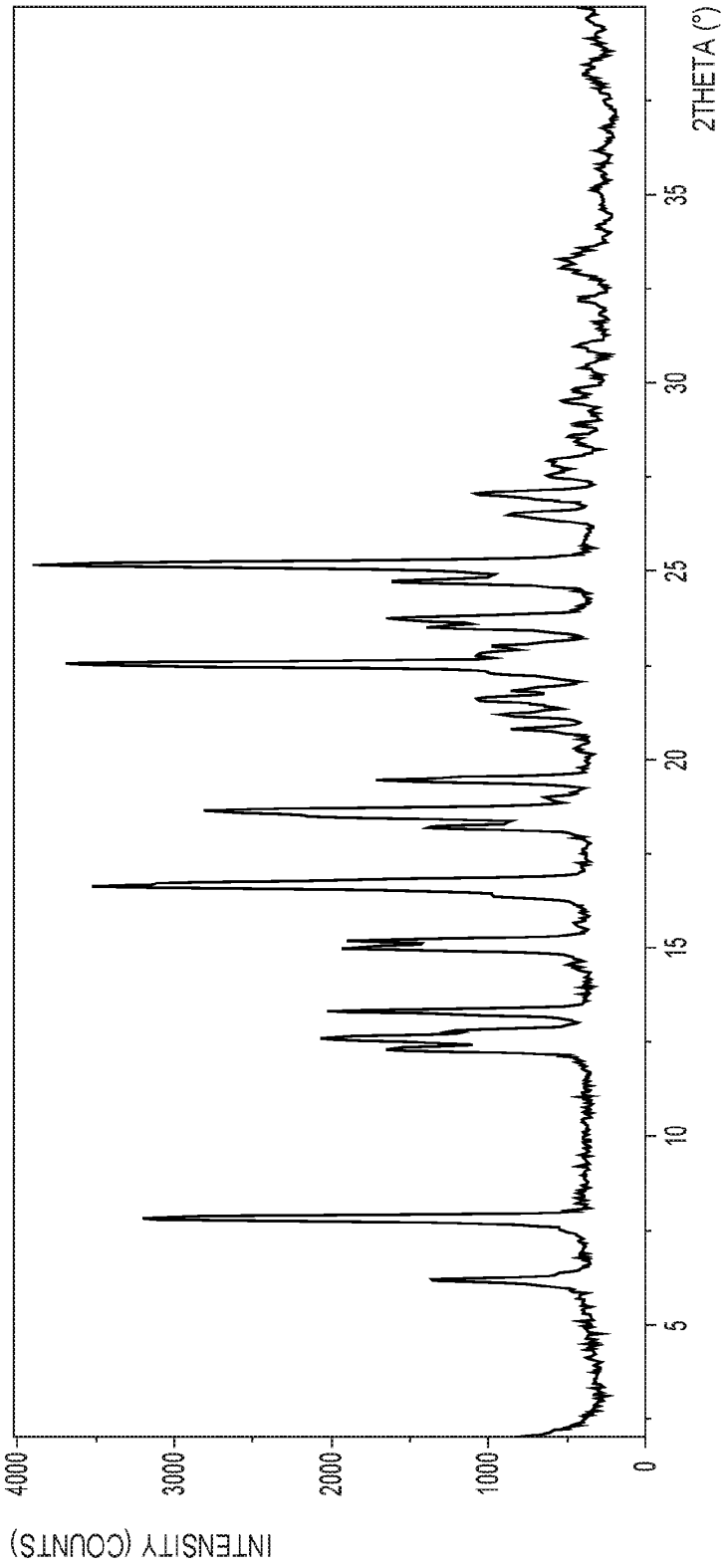
INTENSITY (COUNTS)
4000
3000
2000
1000
0
5
10
15
20
25
30
35
2THETA (°)

FIG. 8

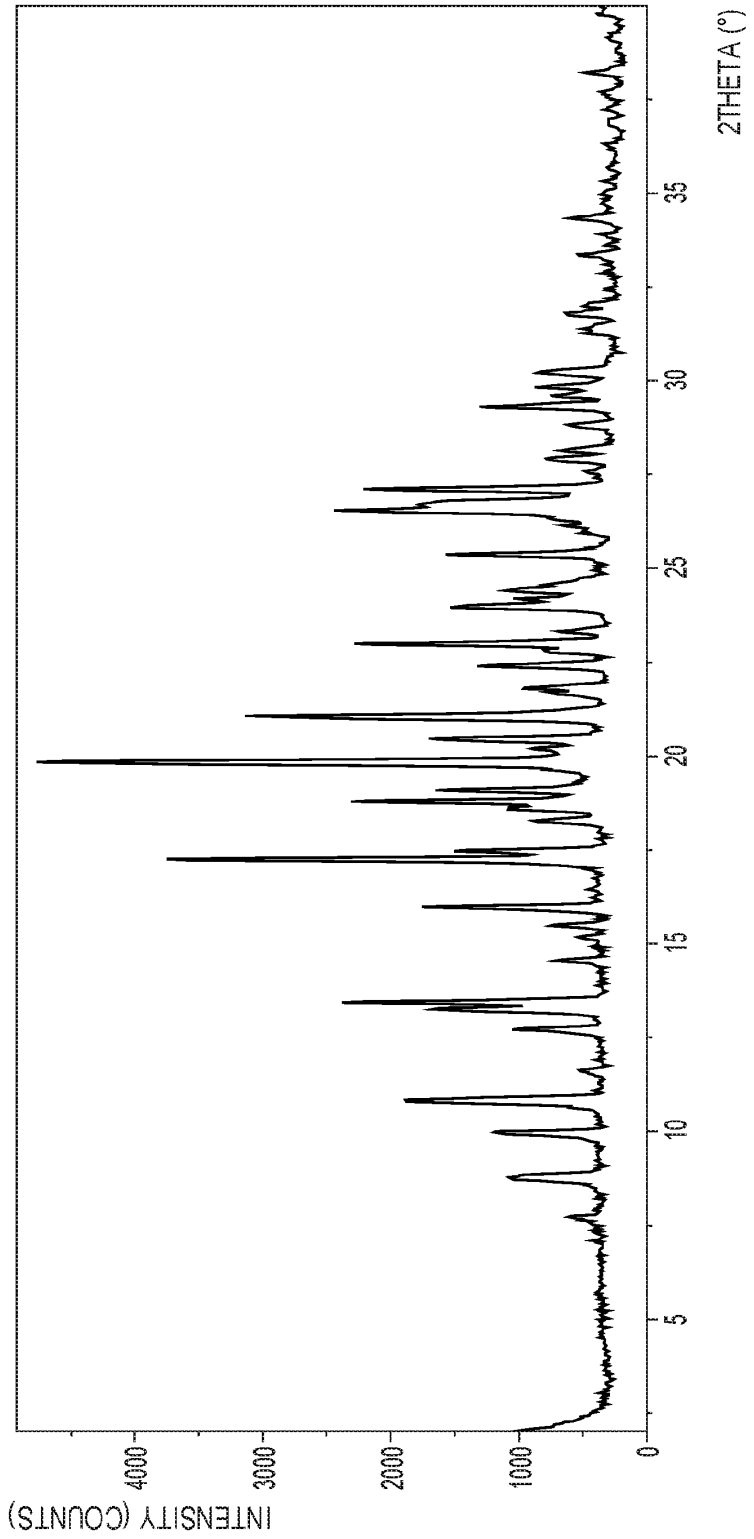
INTENSITY (COUNTS)
0
1000
2000
3000
4000
5
10
15
20
25
30
35
2THETA (°)

FIG. 9

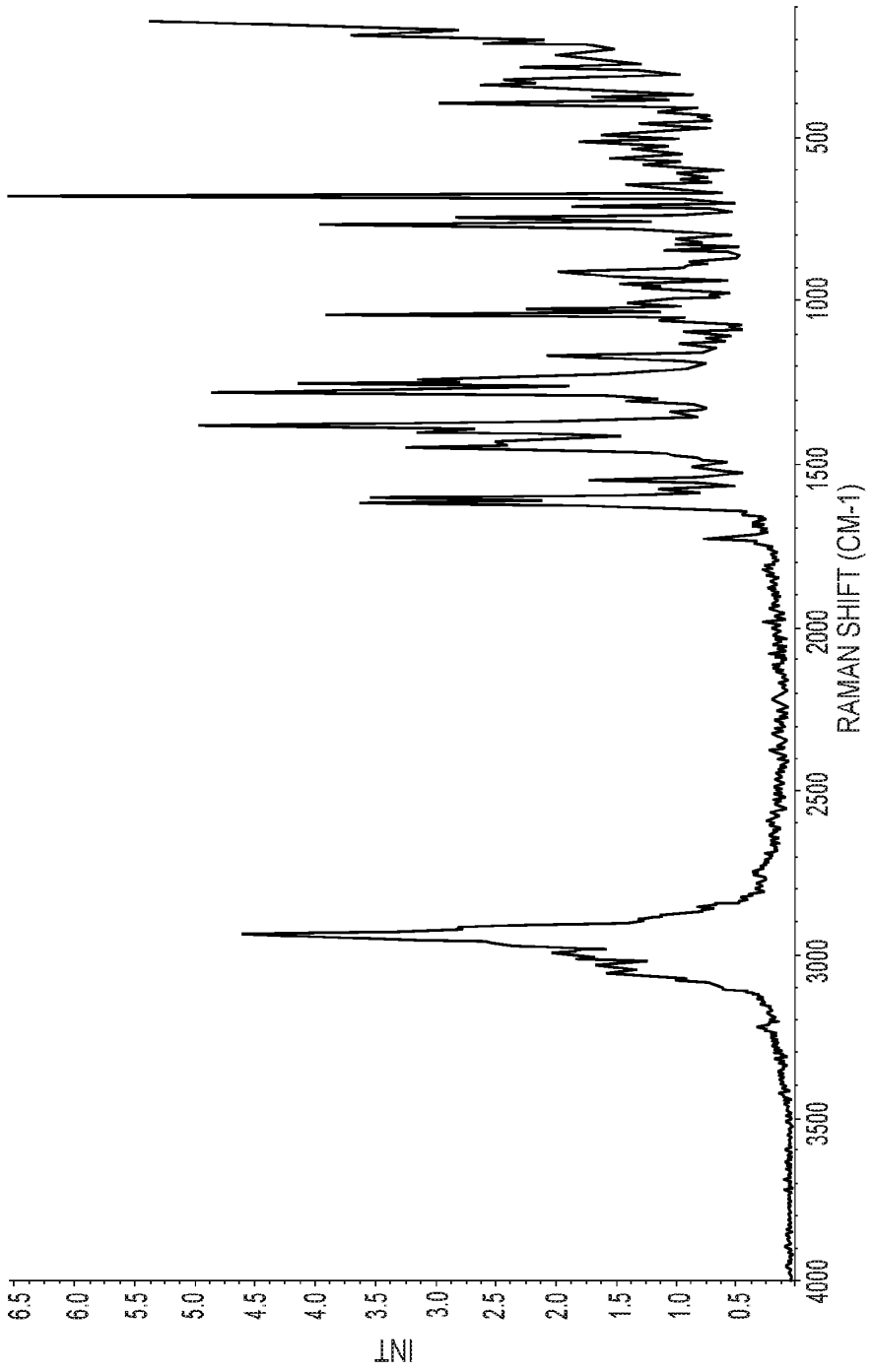
INT
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
4000
3500
3000
2500
2000
1500
1000
500
RAMAN SHIFT (CM-1)

FIG. 10

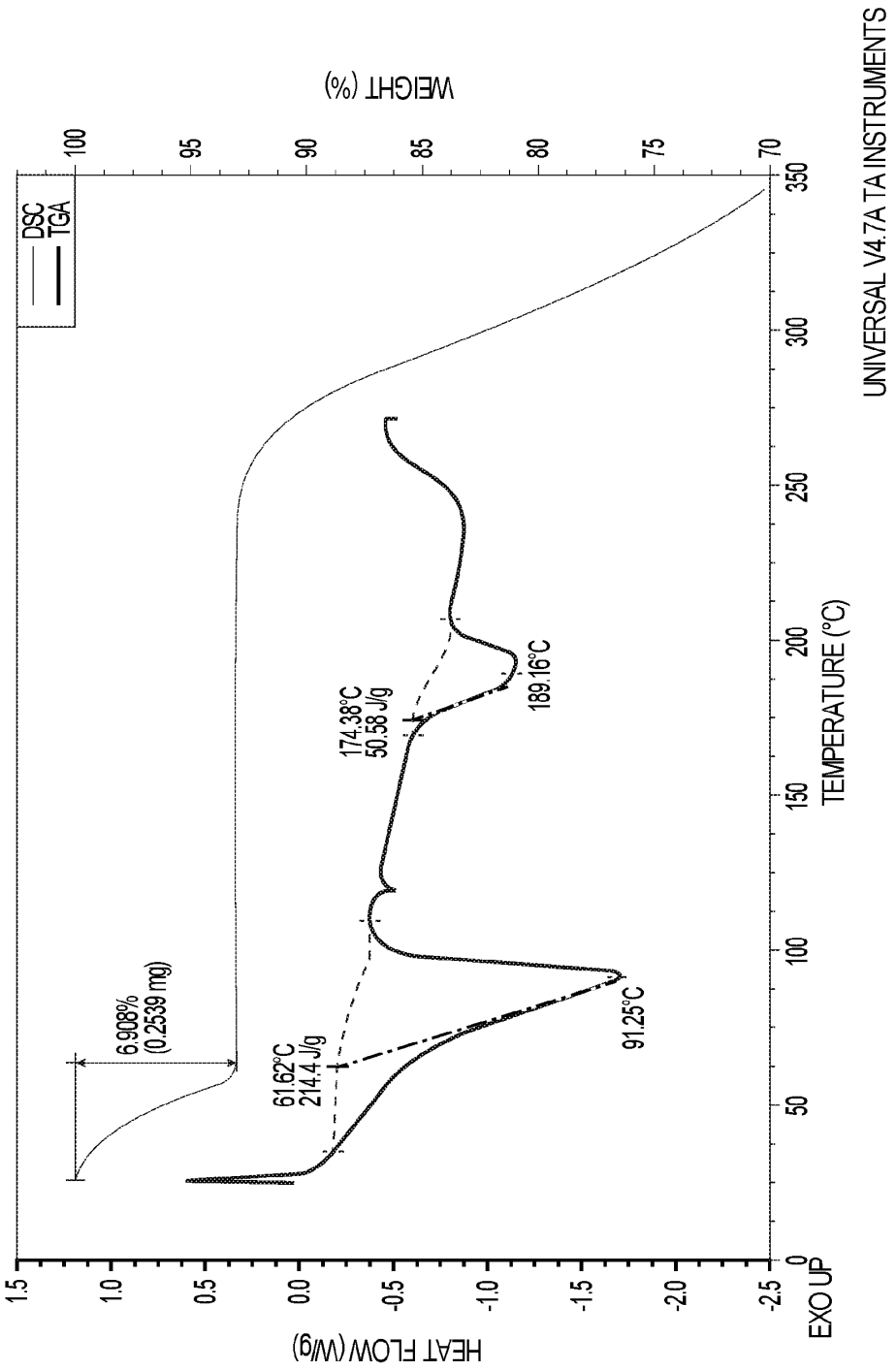
DSC
TGA
6.908%
(0.2539 mg)
61.62°C
214.4 J/g
174.38°C
50.58 J/g
189.16°C
91.25°C
HEAT FLOW (W/g)
EXO UP
WEIGHT (%)
TEMPERATURE (°C)
UNIVERSAL V4.7A TA INSTRUMENTS

FIG. 11

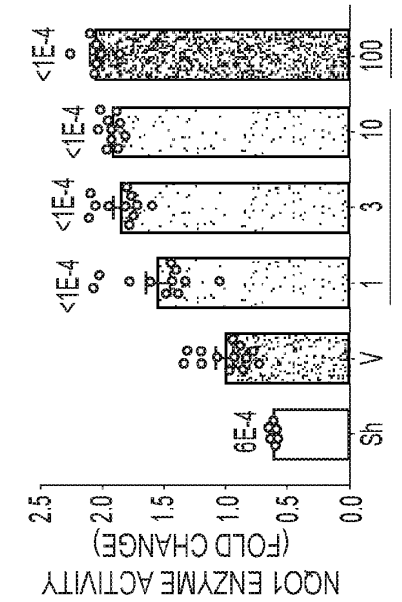

FIG. 12B

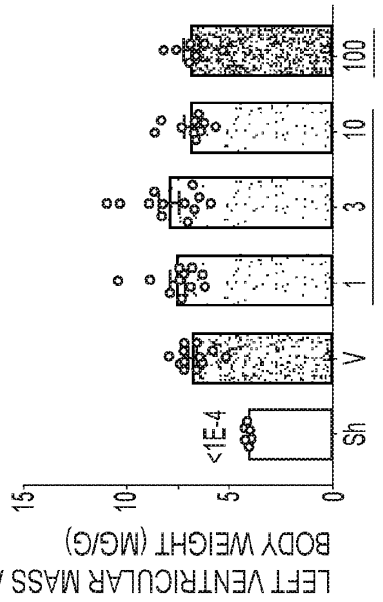

FIG. 12D

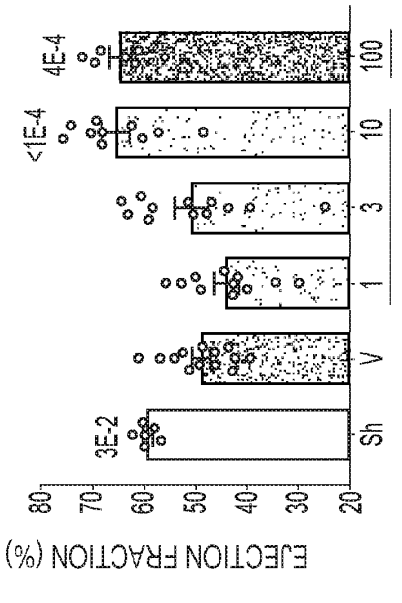

FIG. 12A

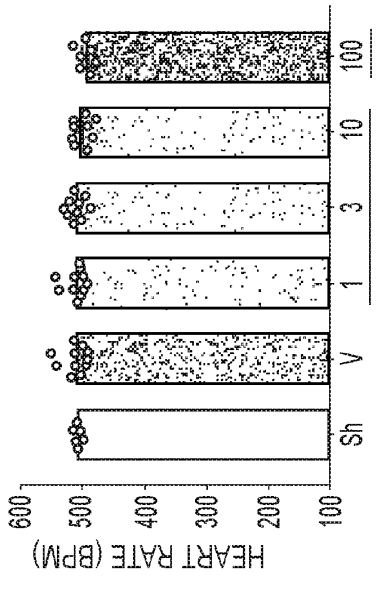

FIG. 12C