

Fig. 1
(Prior Art)

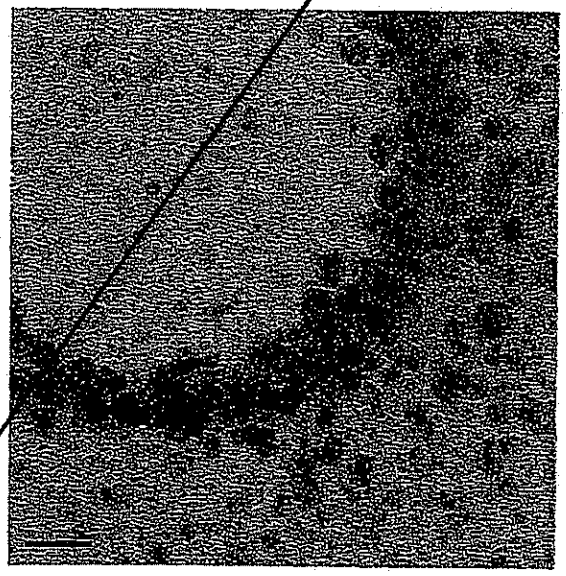


Fig. 2

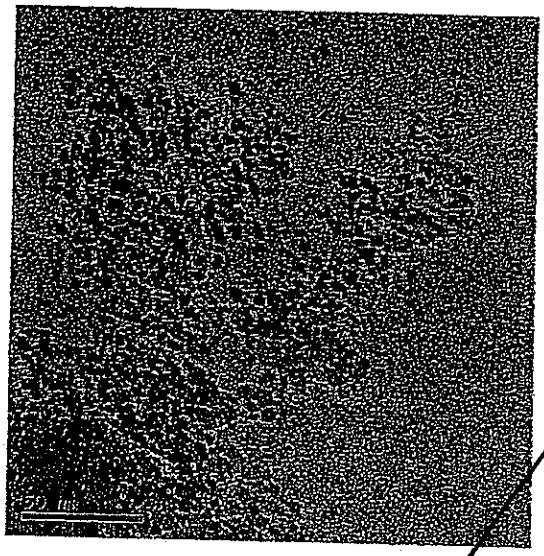


Fig. 3
(Prior Art)

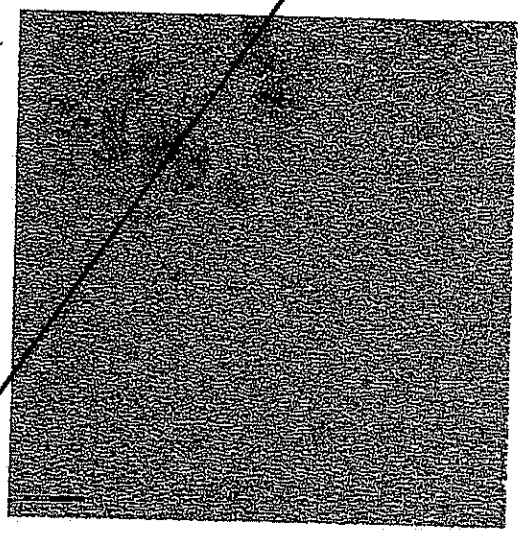


Fig. 4

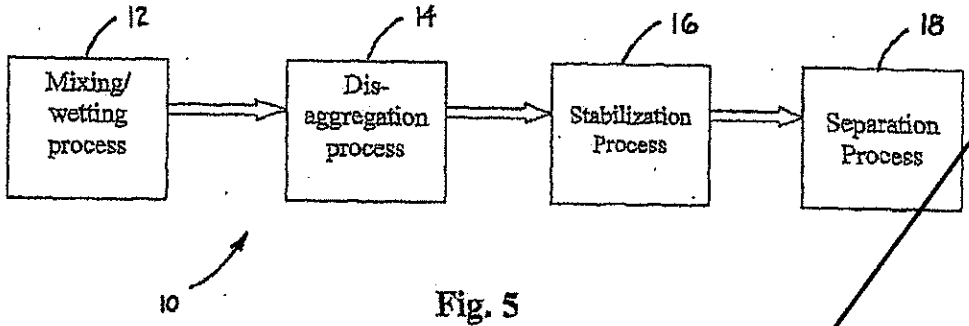

12
14
16
18
Mixing/ wetting process
Dis-aggregation process
Stabilization Process
Separation Process
10

Fig. 5

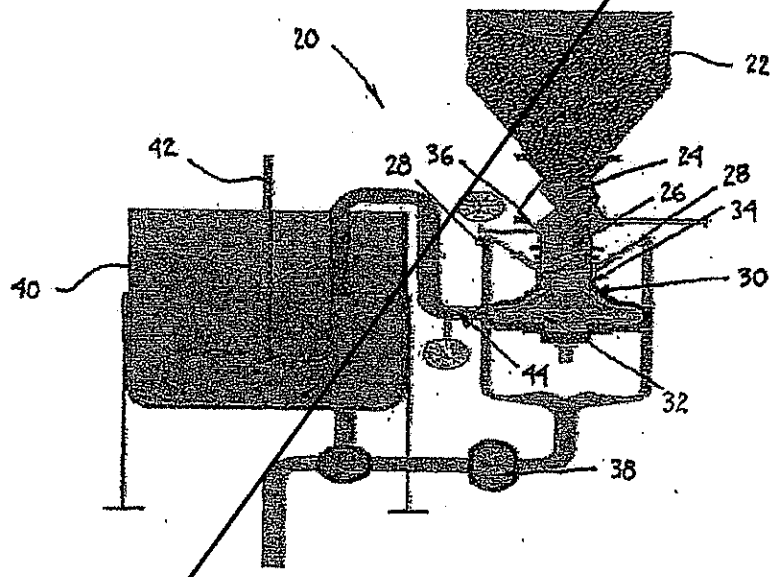

20
22
42
28
36
24
28
26
34
40
30
41
32
38

Fig. 6

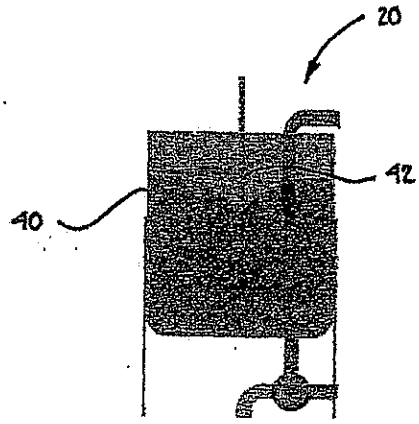


Fig. 7

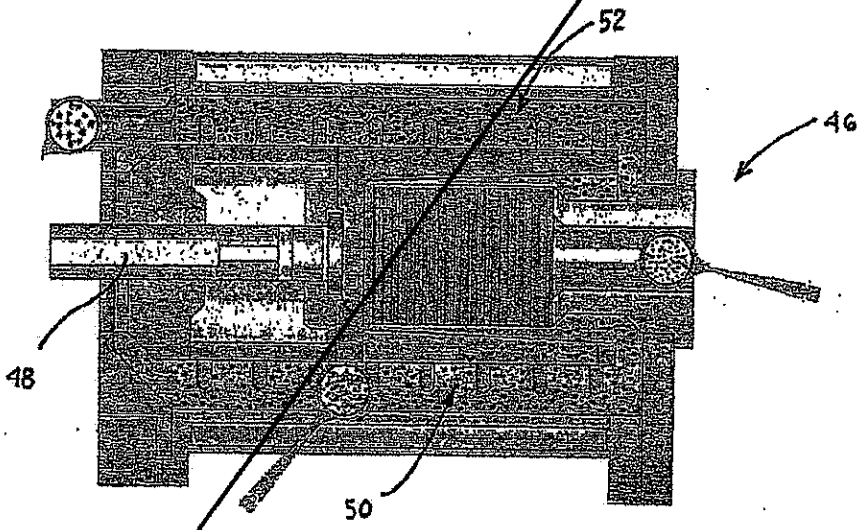


Fig. 8

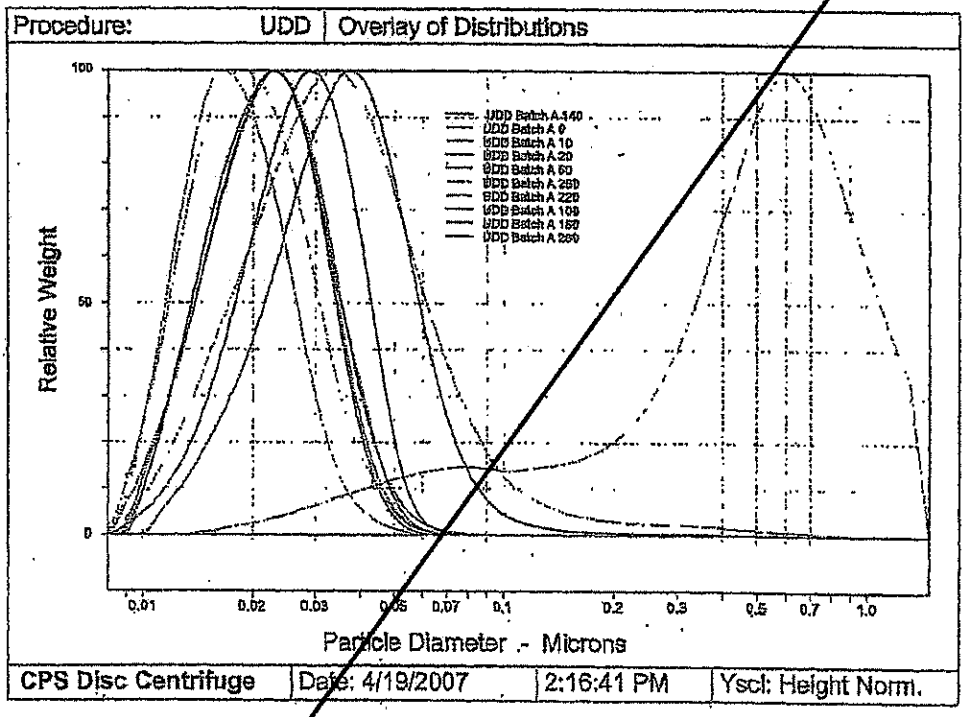

Procedure: UDD | Overlay of Distributions
Relative Weight
100
50
0
UDD Batch A 140
UDD Batch A 0
UDD Batch A 10
UDD Batch A 20
UDD Batch A 60
UDD Batch A 260
UDD Batch A 220
UDD Batch A 100
UDD Batch A 180
UDD Batch A 200
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
Particle Diameter - Microns
CPS Disc Centrifuge | Date: 4/19/2007 | 2:16:41 PM | Yscl: Height Norm.

Fig. 9

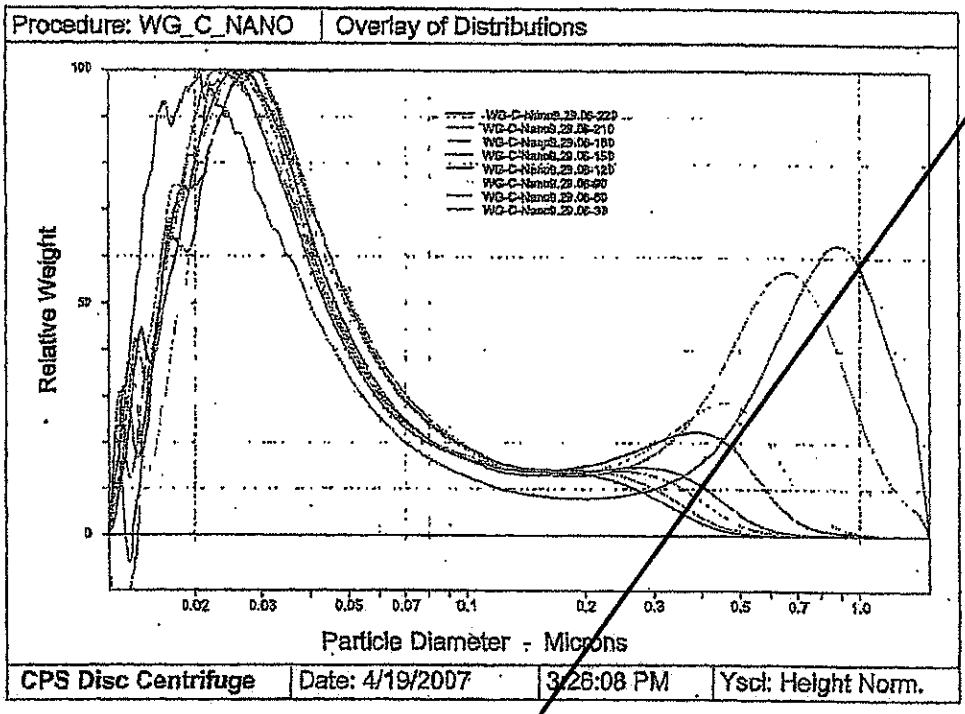

Procedure: WG_C_NANO
Overlay of Distributions
Relative Weight
100
50
0
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
Particle Diameter - Microns
CPS Disc Centrifuge
Date: 4/19/2007
3:26:08 PM
Ysc: Height Norm.

Fig. 10

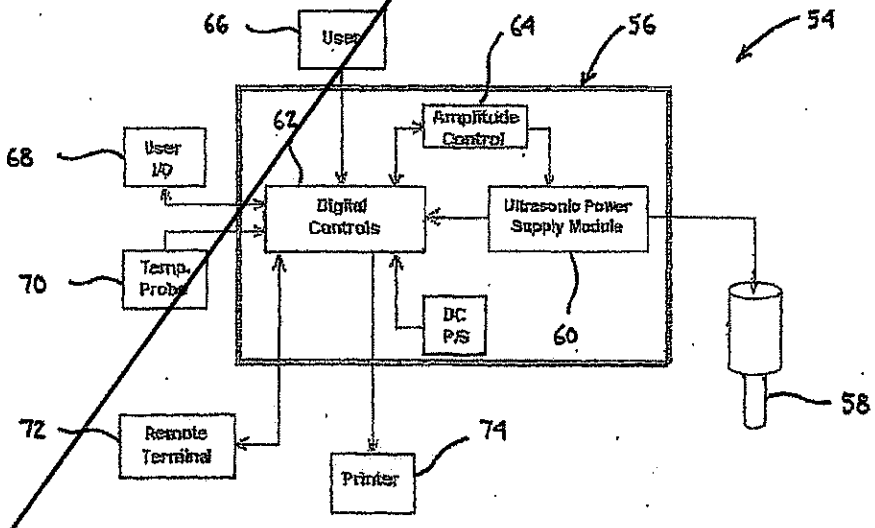

66
User
64
56
54
62
Amplitude Control
68
User I/O
Digital Controls
Ultrasonic Power Supply Module
70
Temp. Probe
DC P/S
60
58
72
Remote Terminal
74
Printer

Fig. 11

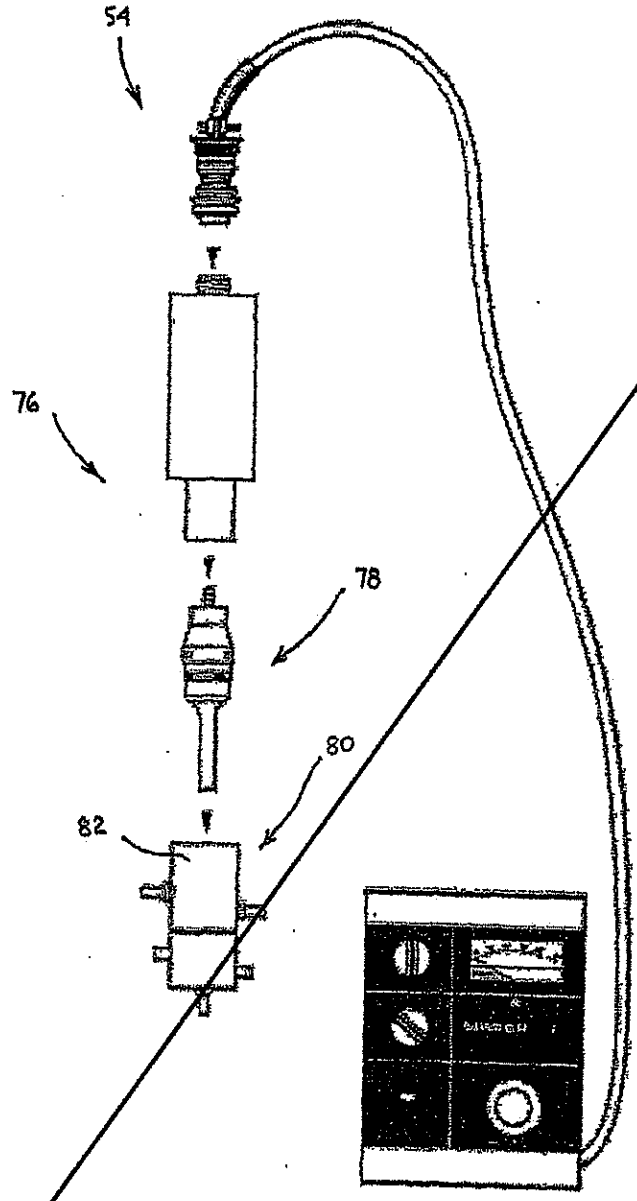


Fig. 12

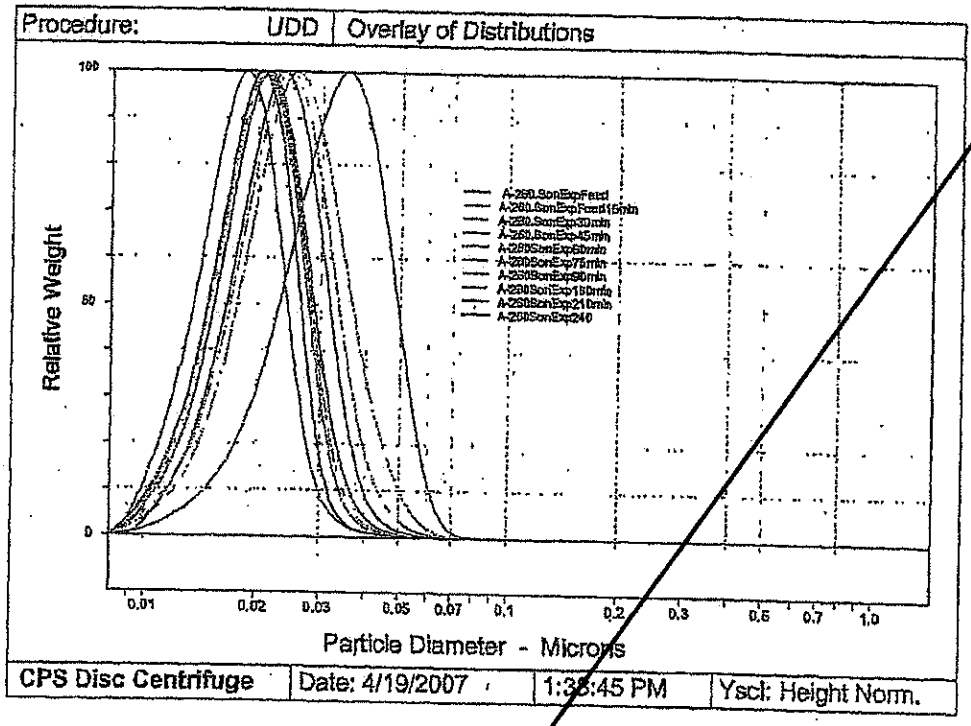

Procedure: UDD Overlay of Distributions
Relative Weight
100
50
0
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
Particle Diameter - Microns
CPS Disc Centrifuge
Date: 4/19/2007
1:38:45 PM
Ysci: Height Norm.

Fig. 13

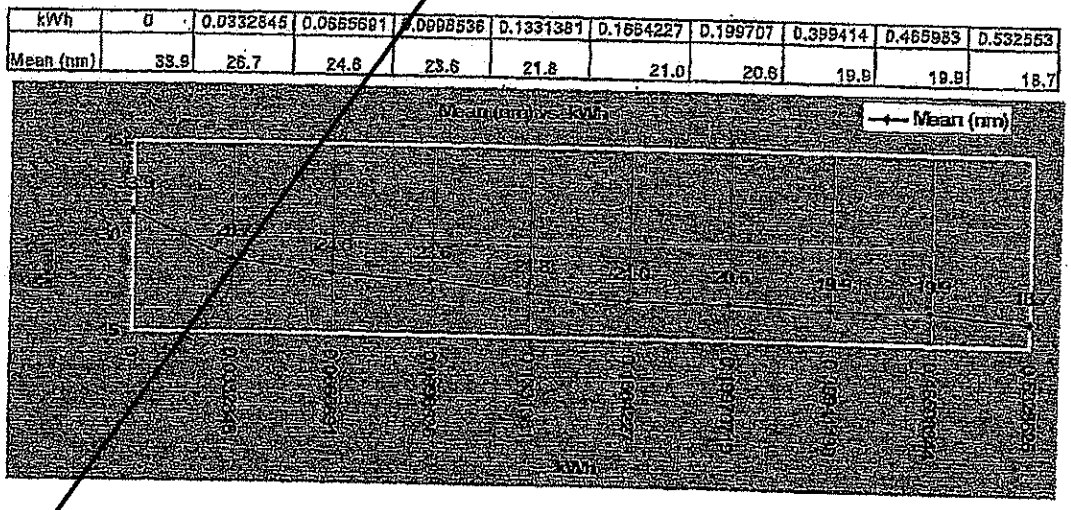

kWh 0 0.0332845 0.0665691 0.0998536 0.1331381 0.1664227 0.199707 0.399414 0.465983 0.532553
Mean (nm) 38.9 26.7 24.8 23.6 21.8 21.0 20.6 19.9 19.9 18.7
Mean (nm) vs. kWh
Mean (nm)
kWh

Fig. 14

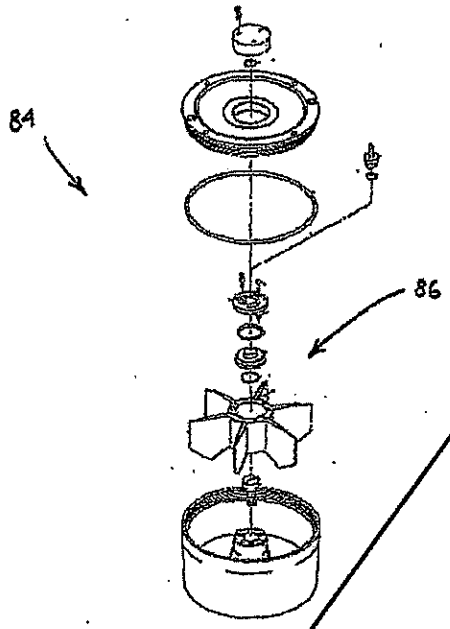


Fig. 15

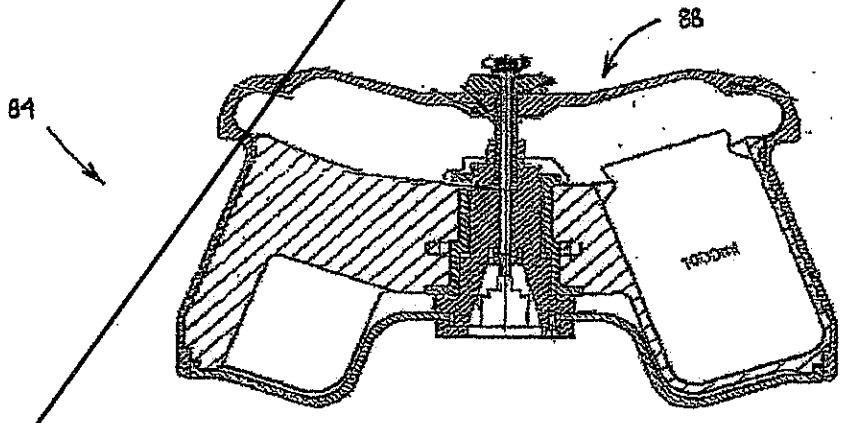


Fig. 16

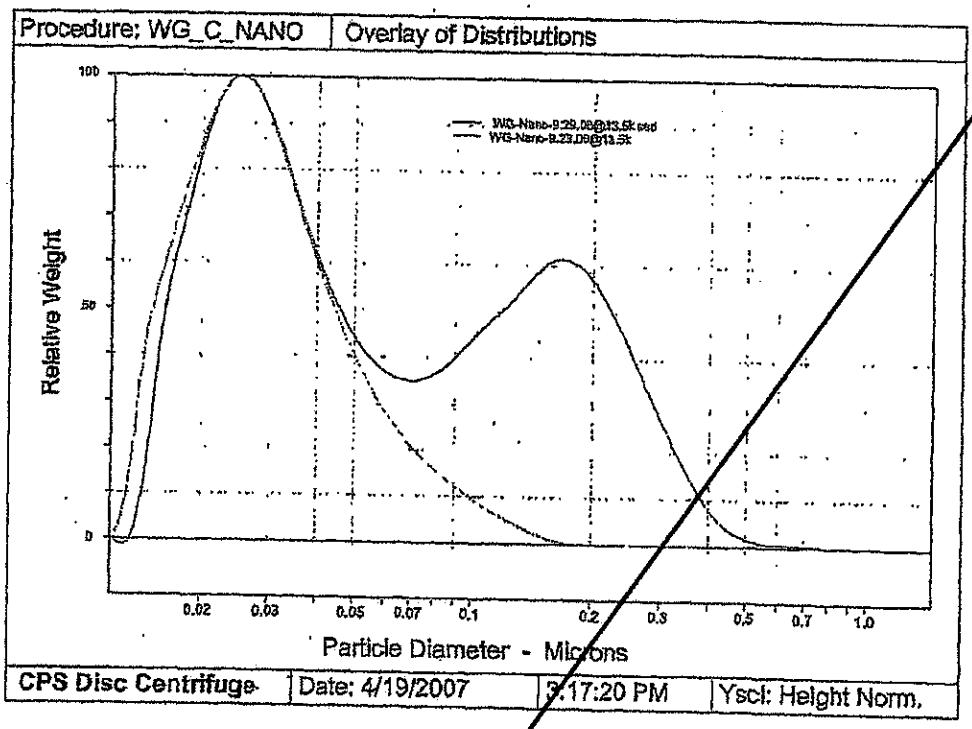

Procedure: WG_C_NANO
Overlay of Distributions
100
50
0
Relative Weight
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
Particle Diameter - Microns
CPS Disc Centrifuge
Date: 4/19/2007
Ycal: Height Norm.

Fig. 17

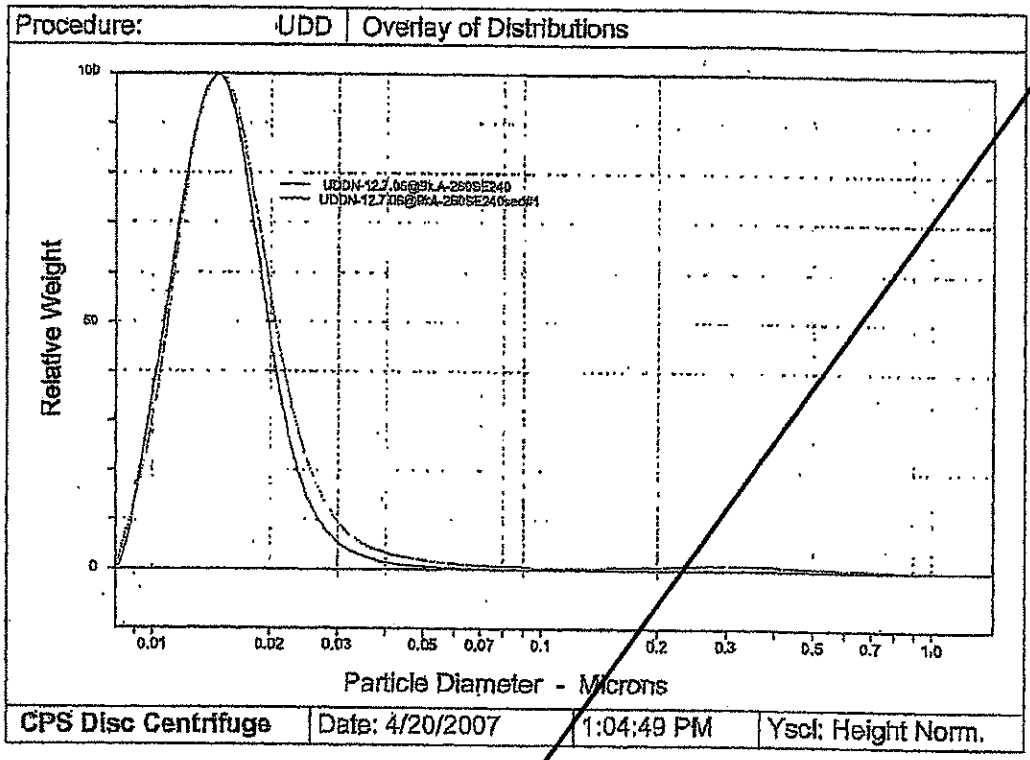

Procedure: UDD | Overlay of Distributions
100
50
0
Relative Weight
UDDN-12.7.06@9LA-250SE240
UDDN-12.7.06@9LA-250SE240sed#1
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
Particle Diameter - Microns
CPS Disc Centrifuge
Date: 4/20/2007
1:04:49 PM
Ysc: Height Norm.

Fig. 18



Fig. 1
(Prior Art)

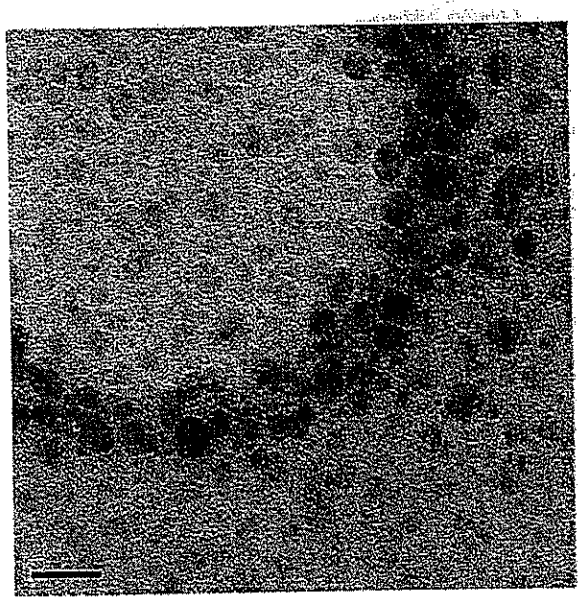


Fig. 2

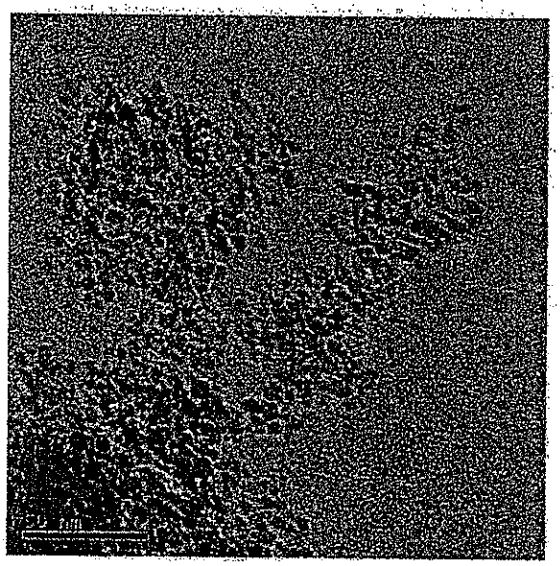


Fig. 3
(Prior Art)

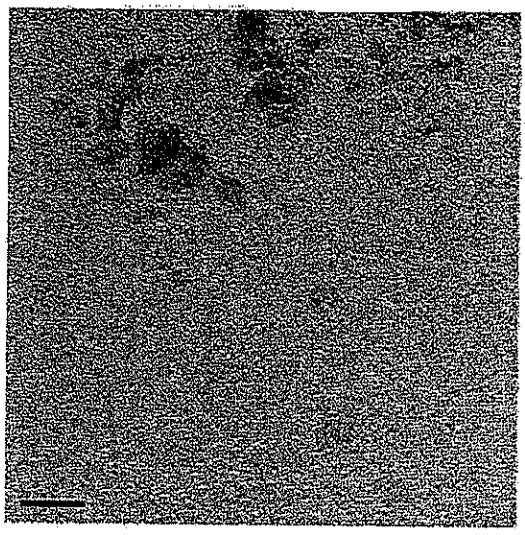


Fig. 4

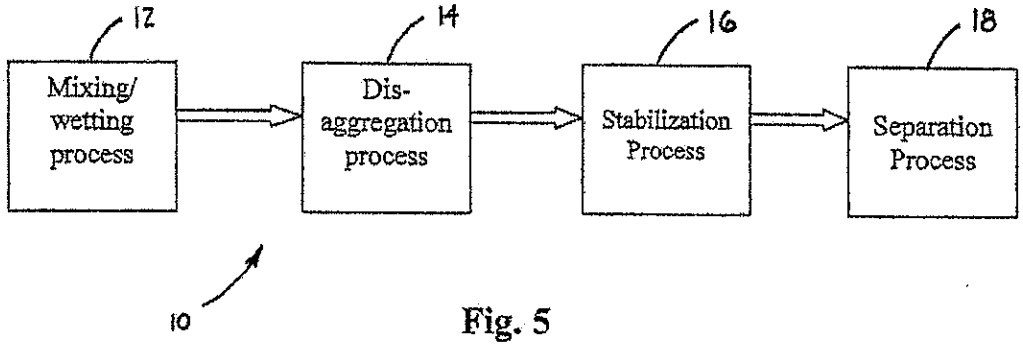

12
14
16
18
Mixing/ wetting process
Dis-aggregation process
Stabilization Process
Separation Process
10

Fig. 5

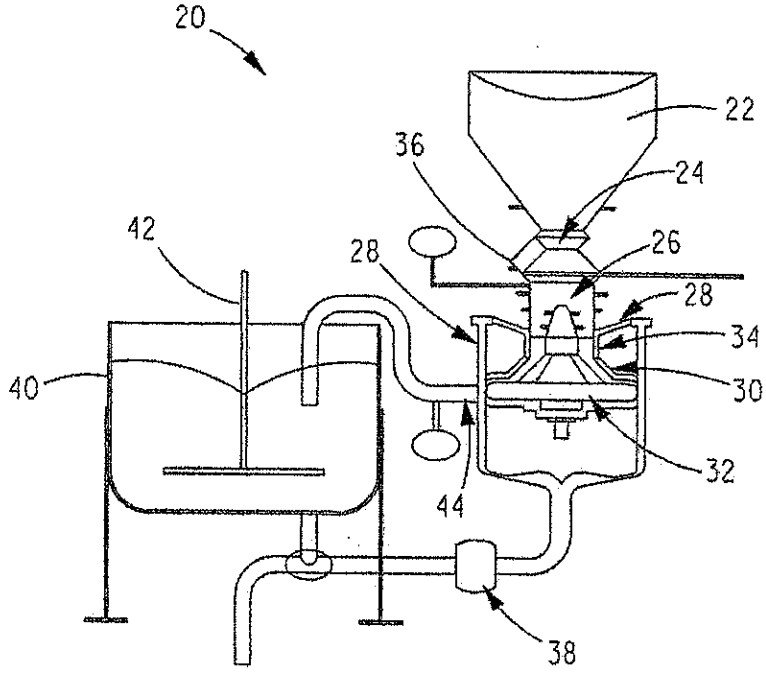

20
22
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42
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28
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30
32
44
38

FIG. 6

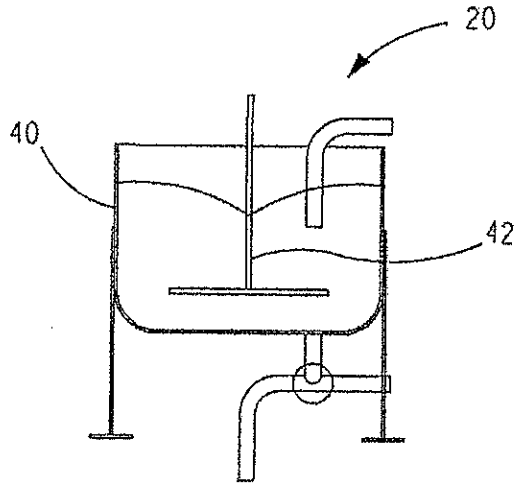


FIG. 7

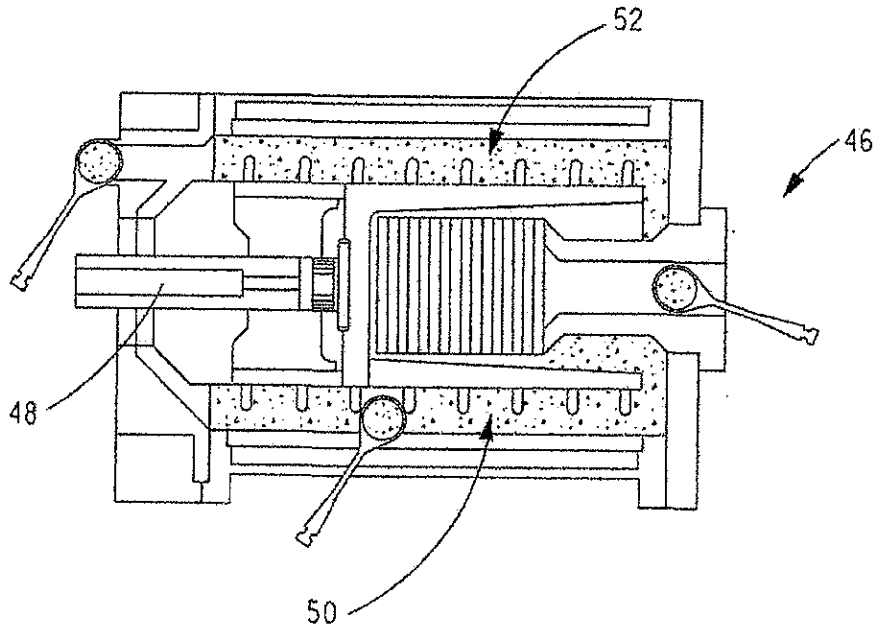


FIG. 8

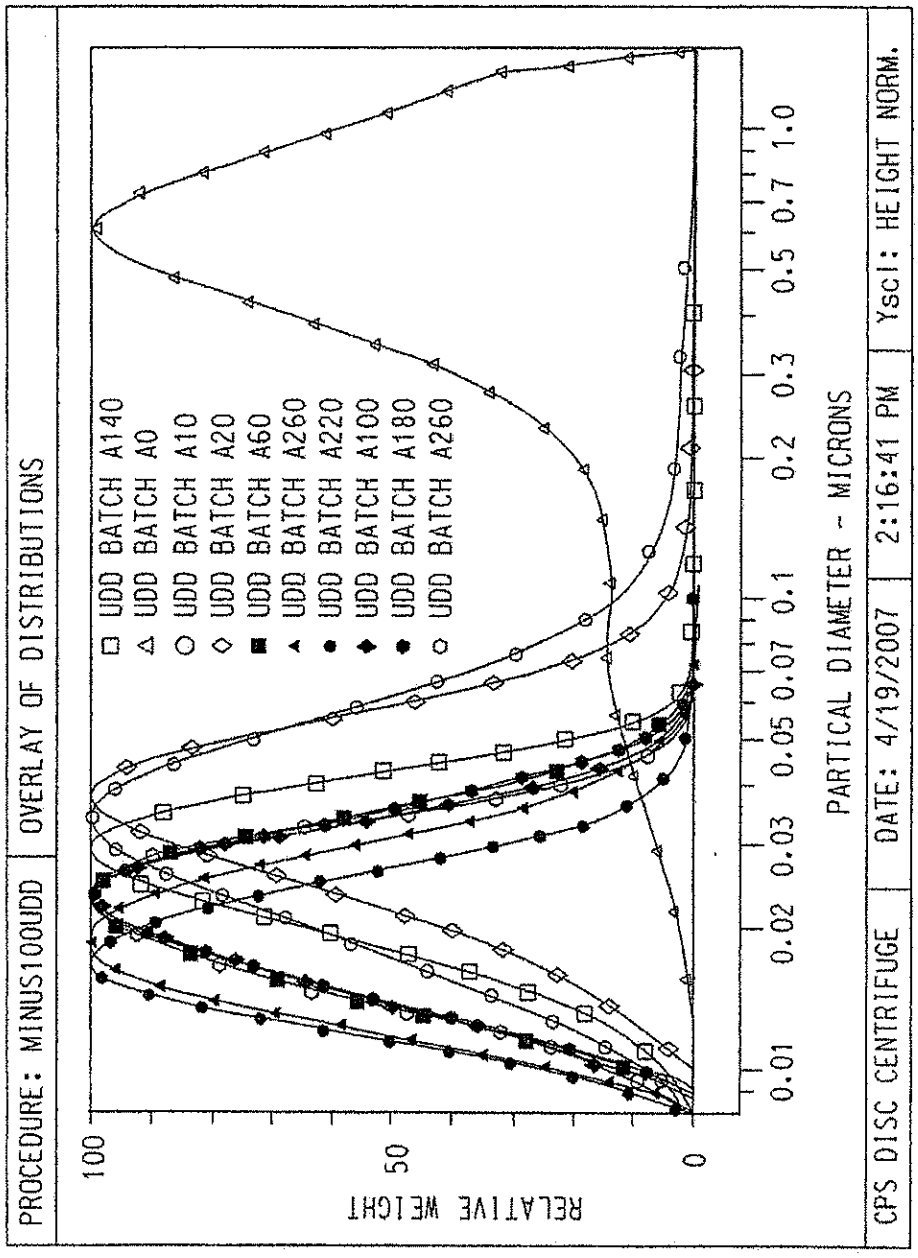

PROCEDURE: MINUS100UDD | OVERLAY OF DISTRIBUTIONS
UDD BATCH A140
UDD BATCH A0
UDD BATCH A10
UDD BATCH A20
UDD BATCH A60
UDD BATCH A260
UDD BATCH A220
UDD BATCH A100
UDD BATCH A180
UDD BATCH A260
RELATIVE WEIGHT
100
50
0
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
PARTICAL DIAMETER - MICRONS
CPS DISC CENTRIFUGE | DATE: 4/19/2007 | 2:16:41 PM | YSCI: HEIGHT NORM.

FIG. 9

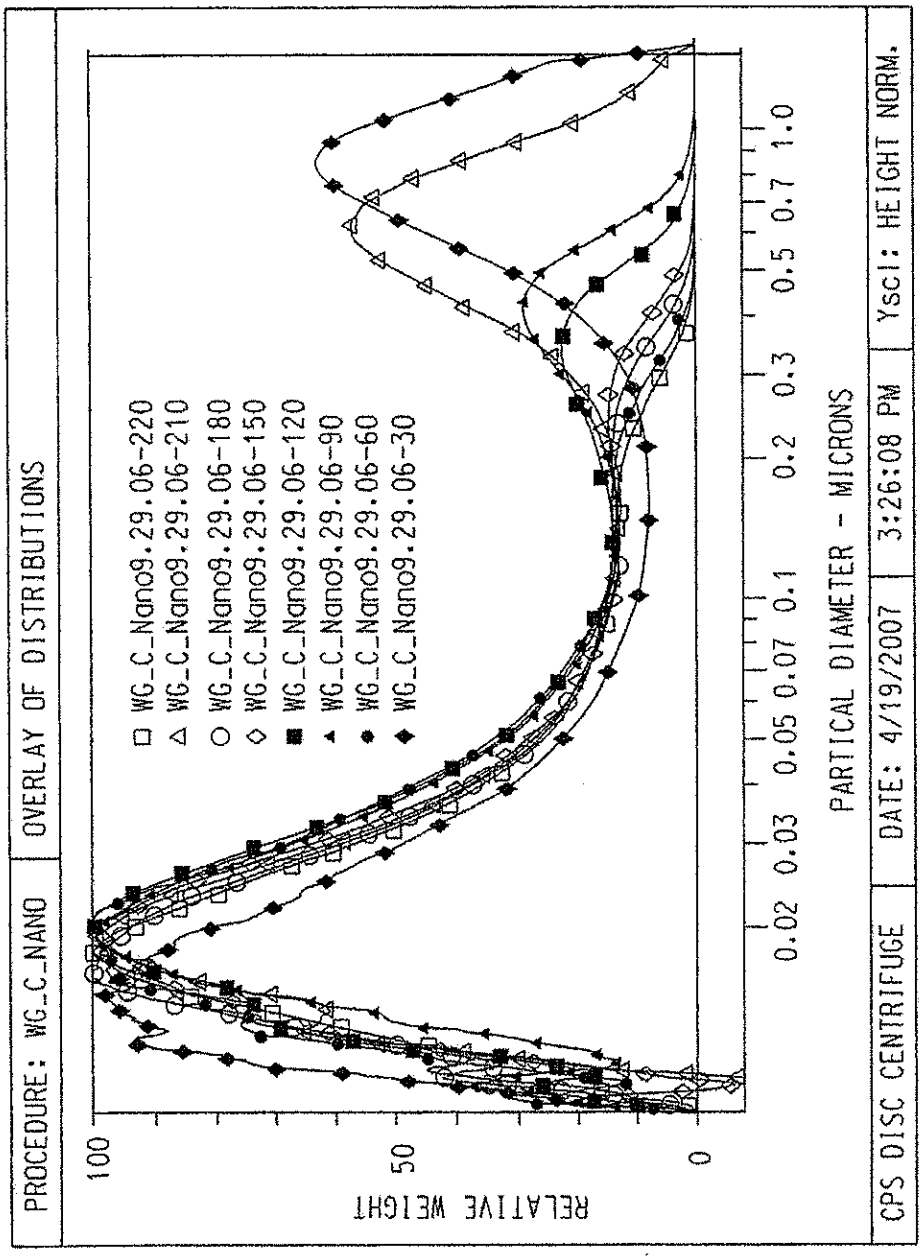

PROCEDURE: WG_C_NANO
OVERLAY OF DISTRIBUTIONS
WG_C_Nano9.29.06-220
WG_C_Nano9.29.06-210
WG_C_Nano9.29.06-180
WG_C_Nano9.29.06-150
WG_C_Nano9.29.06-120
WG_C_Nano9.29.06-90
WG_C_Nano9.29.06-60
WG_C_Nano9.29.06-30
RELATIVE WEIGHT
100
50
0
0.02 0.03 0.05 0.07 0.1 0.2 0.3 0.5 0.7 1.0
PARTICAL DIAMETER - MICRONS
CPS DISC CENTRIFUGE
DATE: 4/19/2007
3:26:08 PM
Ysc1: HEIGHT NORM.

FIG. 10

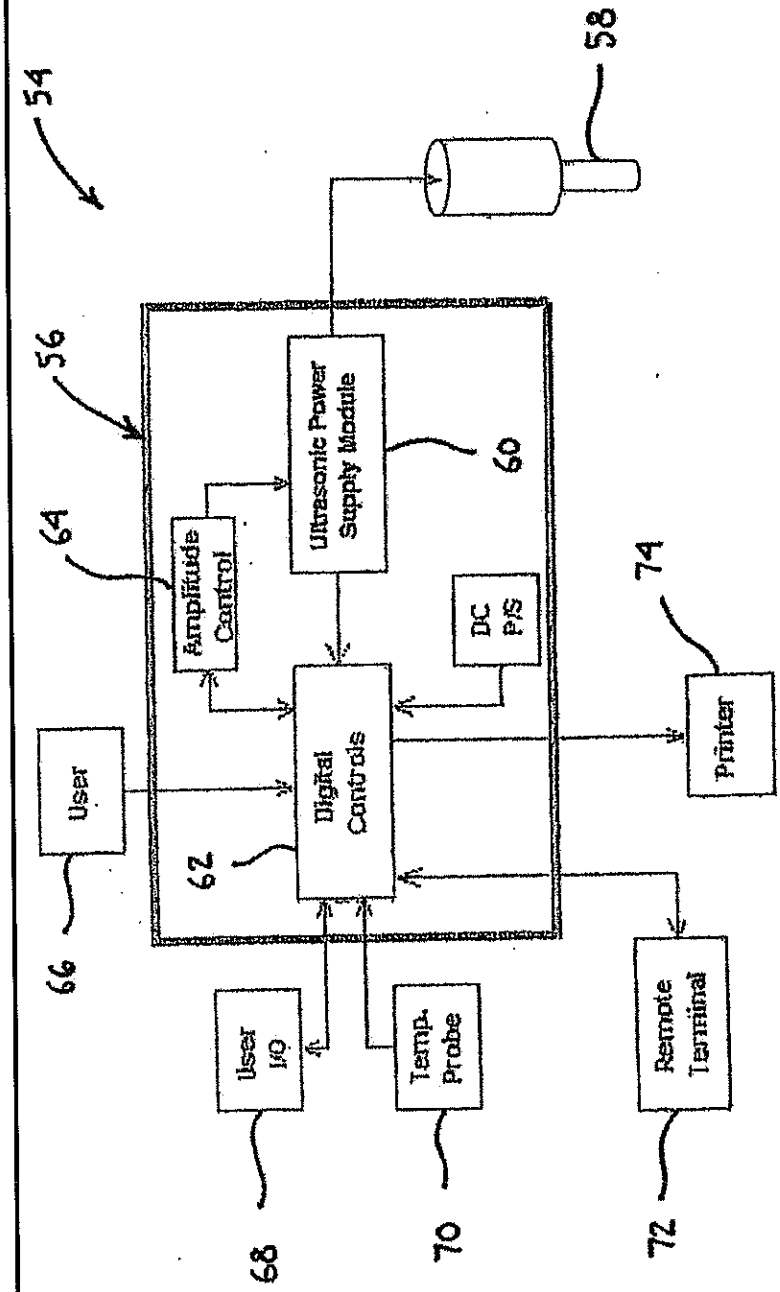

54
58
56
Ultrasonic Power Supply Module
60
64
Amplitude Control
DC P/S
74
User
Digital Controls
Printer
62
66
User I/O
Temp. Probe
Remote Terminal
68
70
72

Fig. 11

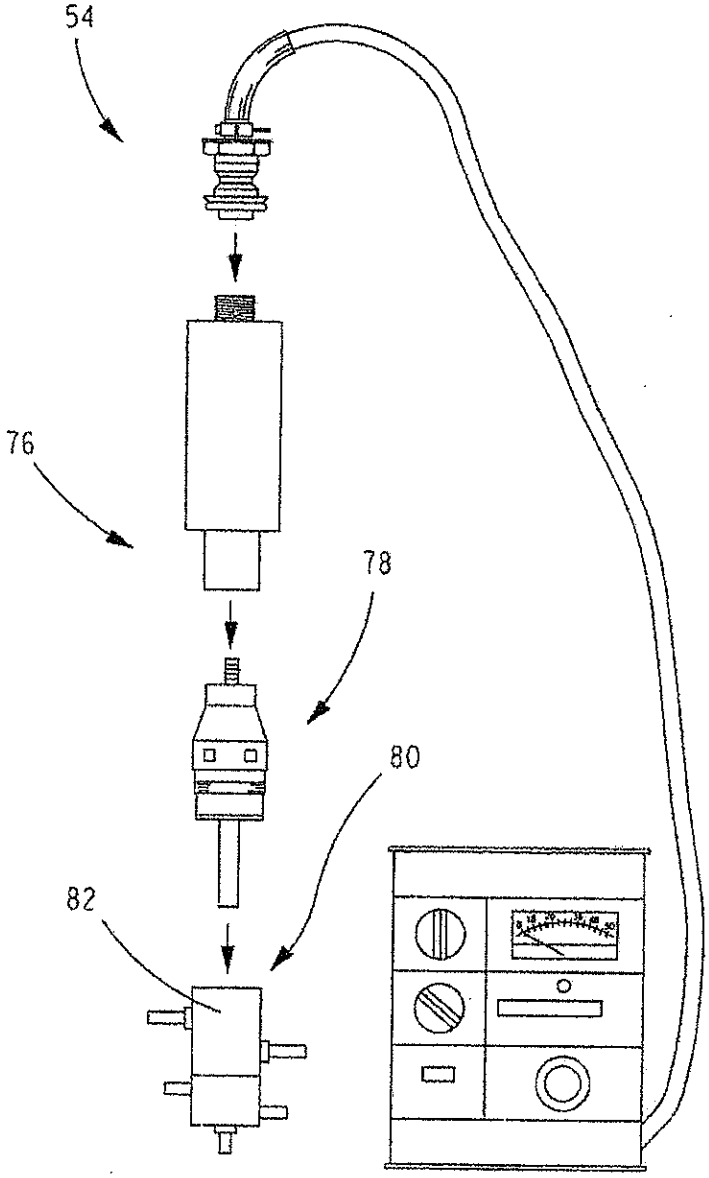


FIG. 12

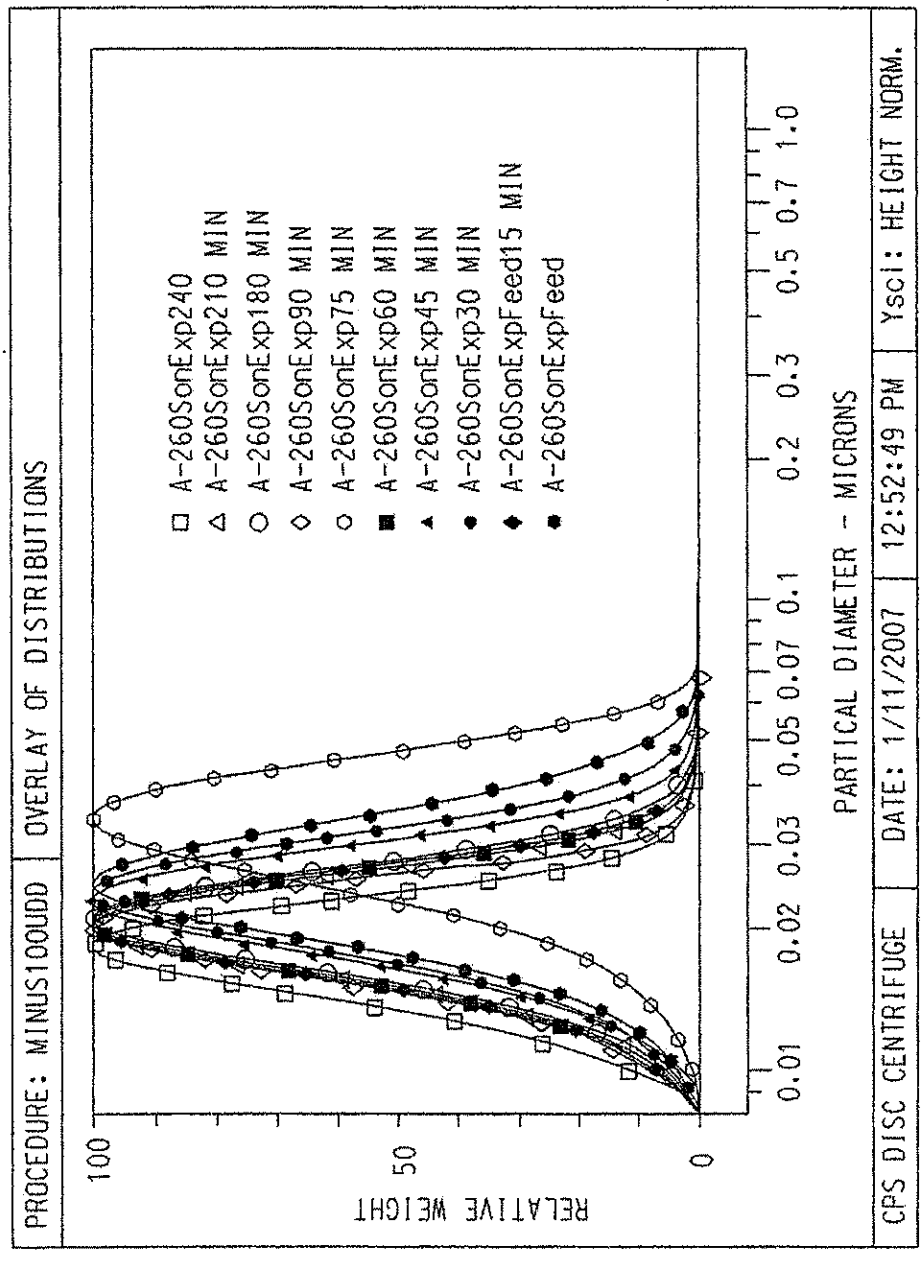

PROCEDURE: MINUS100UDD
OVERLAY OF DISTRIBUTIONS
A-260SonExp240
A-260SonExp210 MIN
A-260SonExp180 MIN
A-260SonExp90 MIN
A-260SonExp75 MIN
A-260SonExp60 MIN
A-260SonExp45 MIN
A-260SonExp30 MIN
A-260SonExpFeed15 MIN
A-260SonExpFeed
RELATIVE WEIGHT
100
50
0
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
PARTICAL DIAMETER - MICRONS
CPS DISC CENTRIFUGE
DATE: 1/11/2007
12:52:49 PM
Ysc1: HEIGHT NORM.

FIG. 13

KWh	0	0.0332845	0.0665691	0.0998536	0.1331381	0.1664227	0.199707	0.399414	0.465983	0.532553
MEAN (nm)	33.9	26.7	24.6	23.6	21.8	21.0	20.6	19.9	19.9	18.7

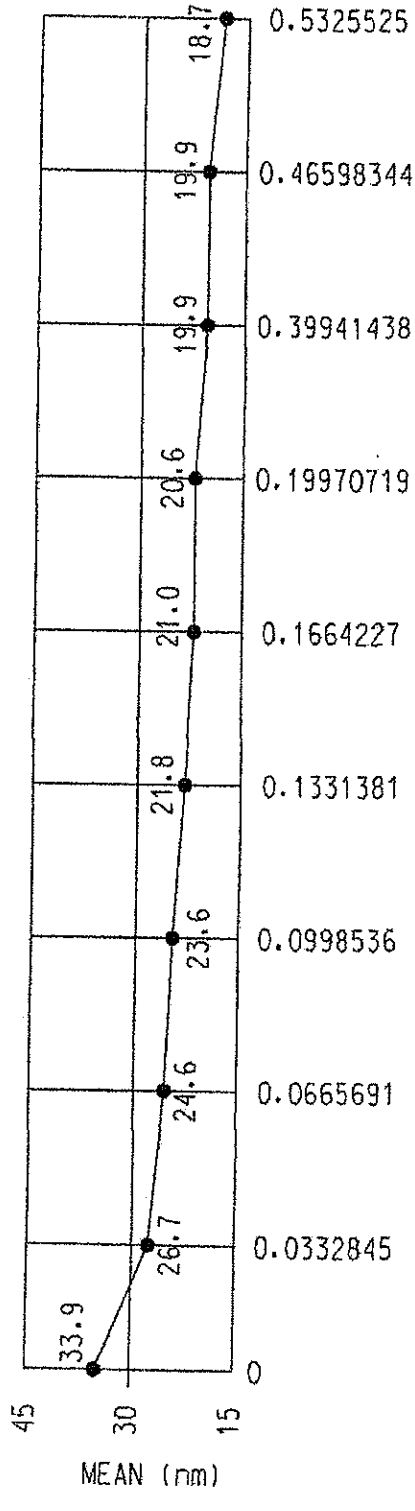


FIG. 14

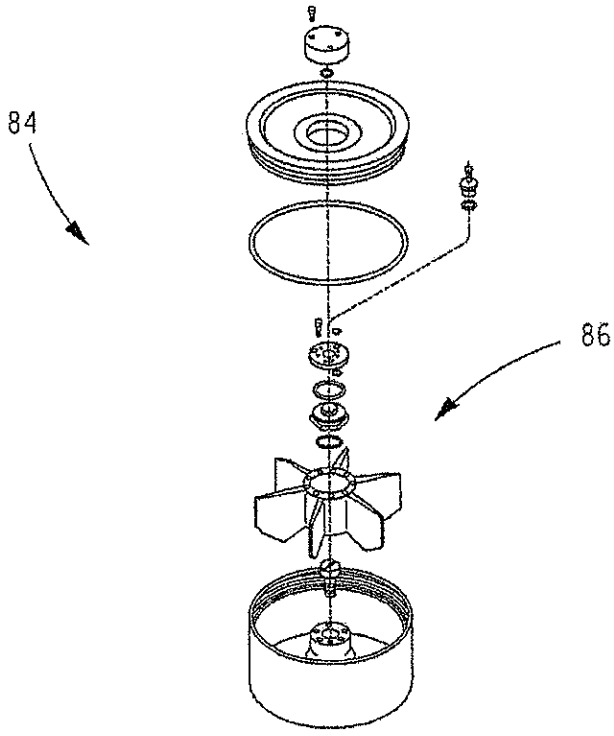


FIG. 15

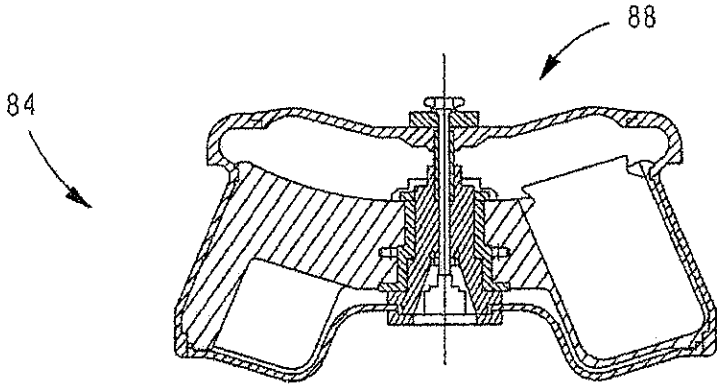


FIG. 16

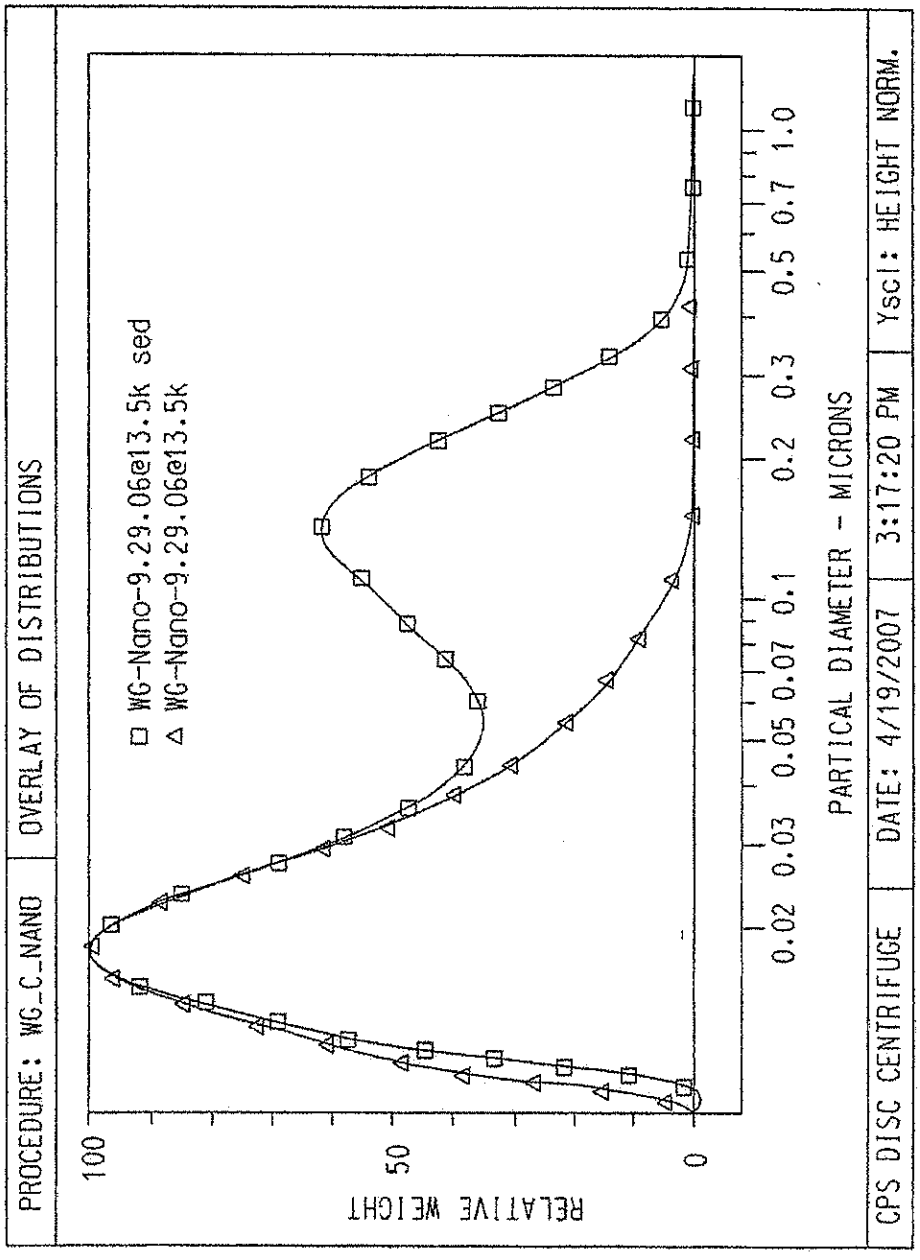

PROCEDURE: WG_C_NANO
OVERLAY OF DISTRIBUTIONS
WG-Nano-9.29.06e13.5k sed
WG-Nano-9.29.06e13.5k
RELATIVE WEIGHT
100
50
0
0.02 0.03 0.05 0.07 0.1 0.2 0.3 0.5 0.7 1.0
PARTICAL DIAMETER - MICRONS
CPS DISC CENTRIFUGE
DATE: 4/19/2007
3:17:20 PM
Ysc1: HEIGHT NORM.

FIG. 17

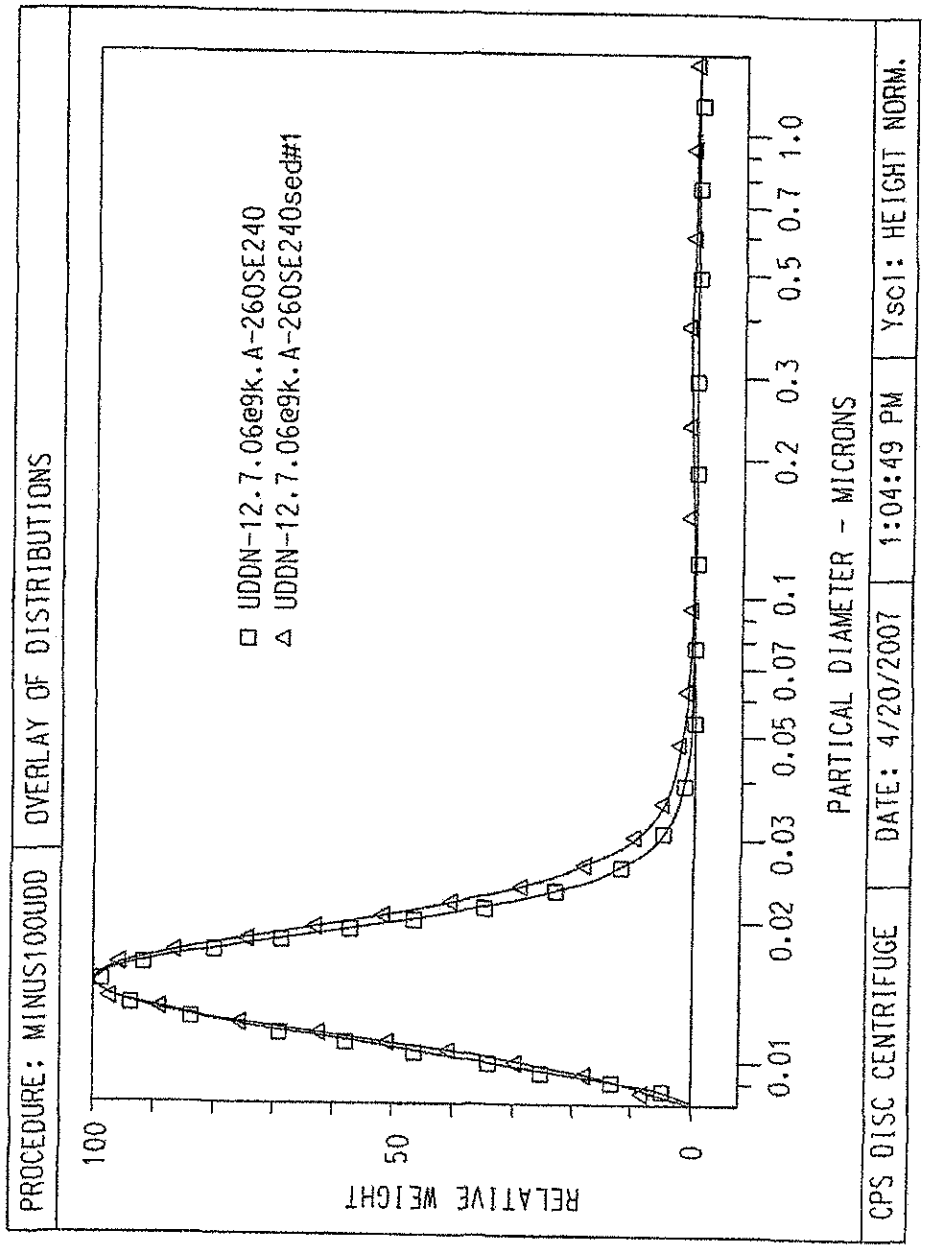

PROCEDURE: MINUS100UDD | OVERLAY OF DISTRIBUTIONS
UDDN-12.7.06e9k.A-260SE240
UDDN-12.7.06e9k.A-260SE240sed#1
RELATIVE WEIGHT
100
50
0
0.01
0.02
0.03
0.05
0.07
0.1
0.2
0.3
0.5
0.7
1.0
PARTICAL DIAMETER - MICRONS
CPS DISC CENTRIFUGE | DATE: 4/20/2007 | 1:04:49 PM | Ysc1: HEIGHT NORM.

FIG. 18