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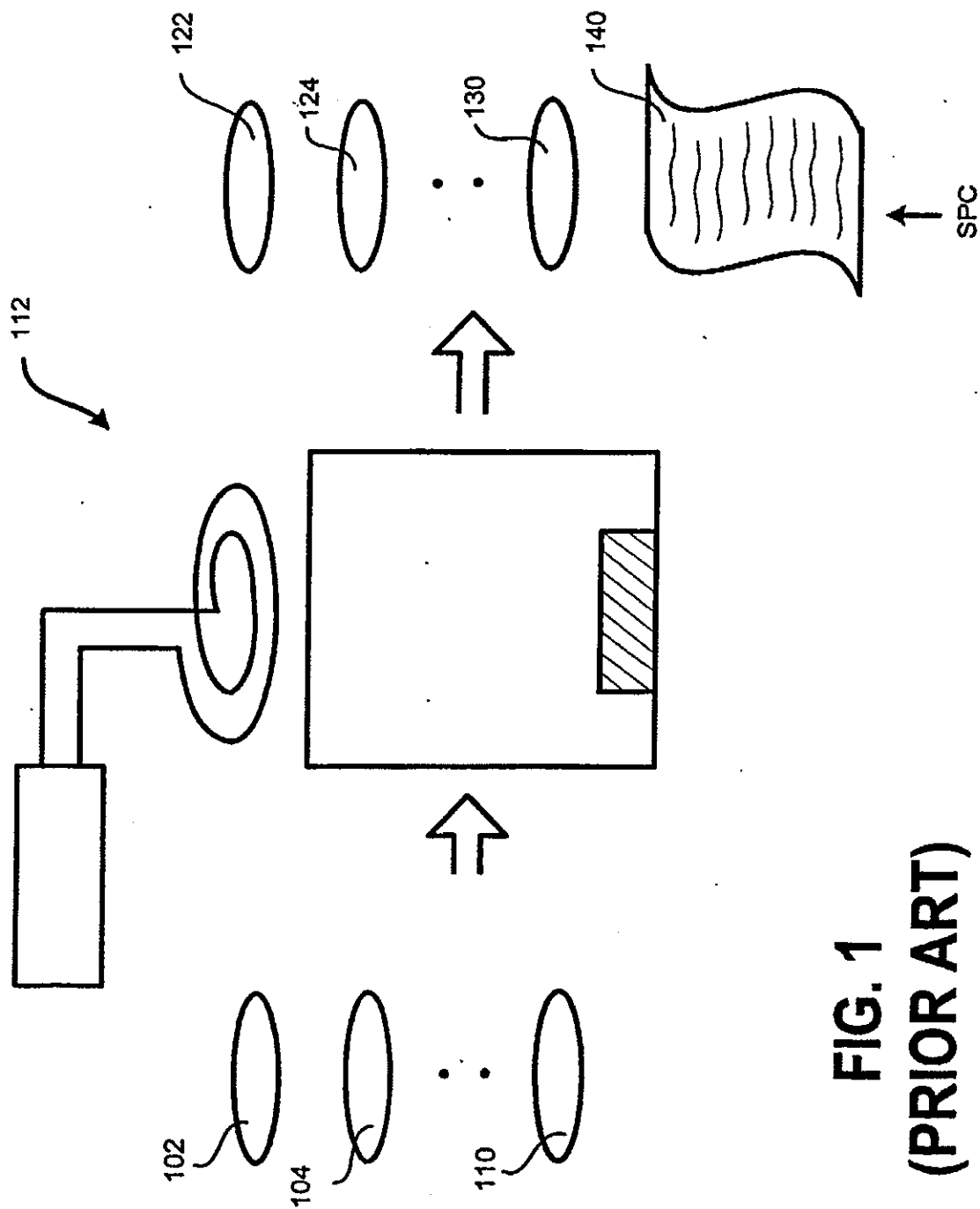
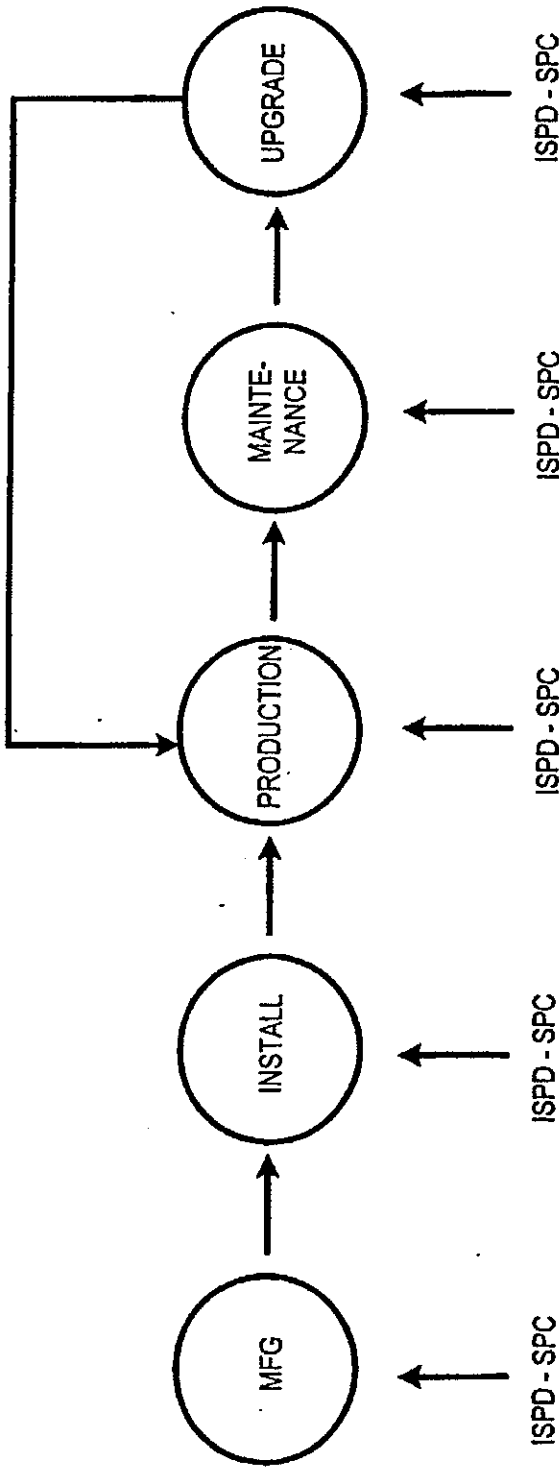


FIG. 1
(PRIOR ART)

FIG. 2A



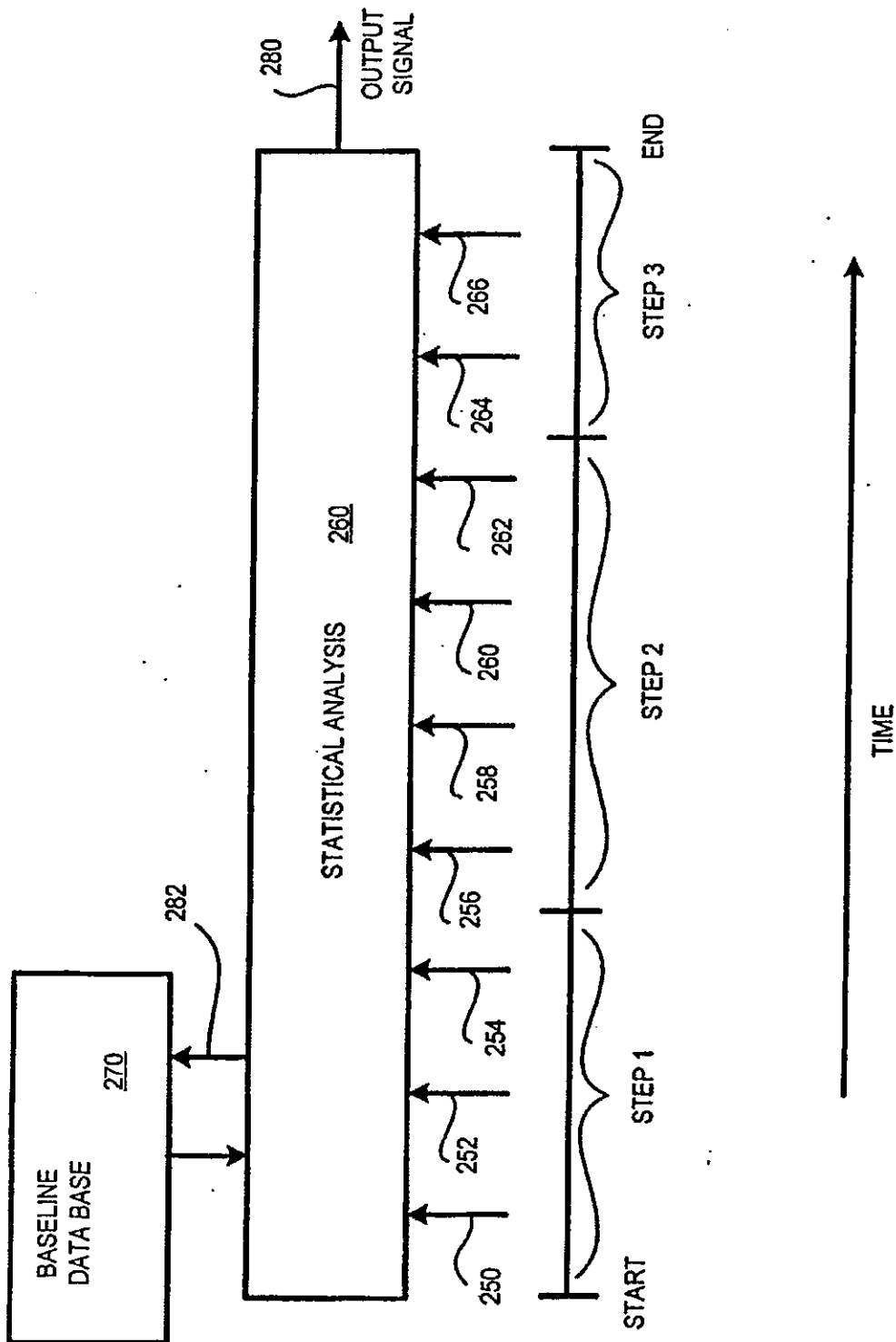
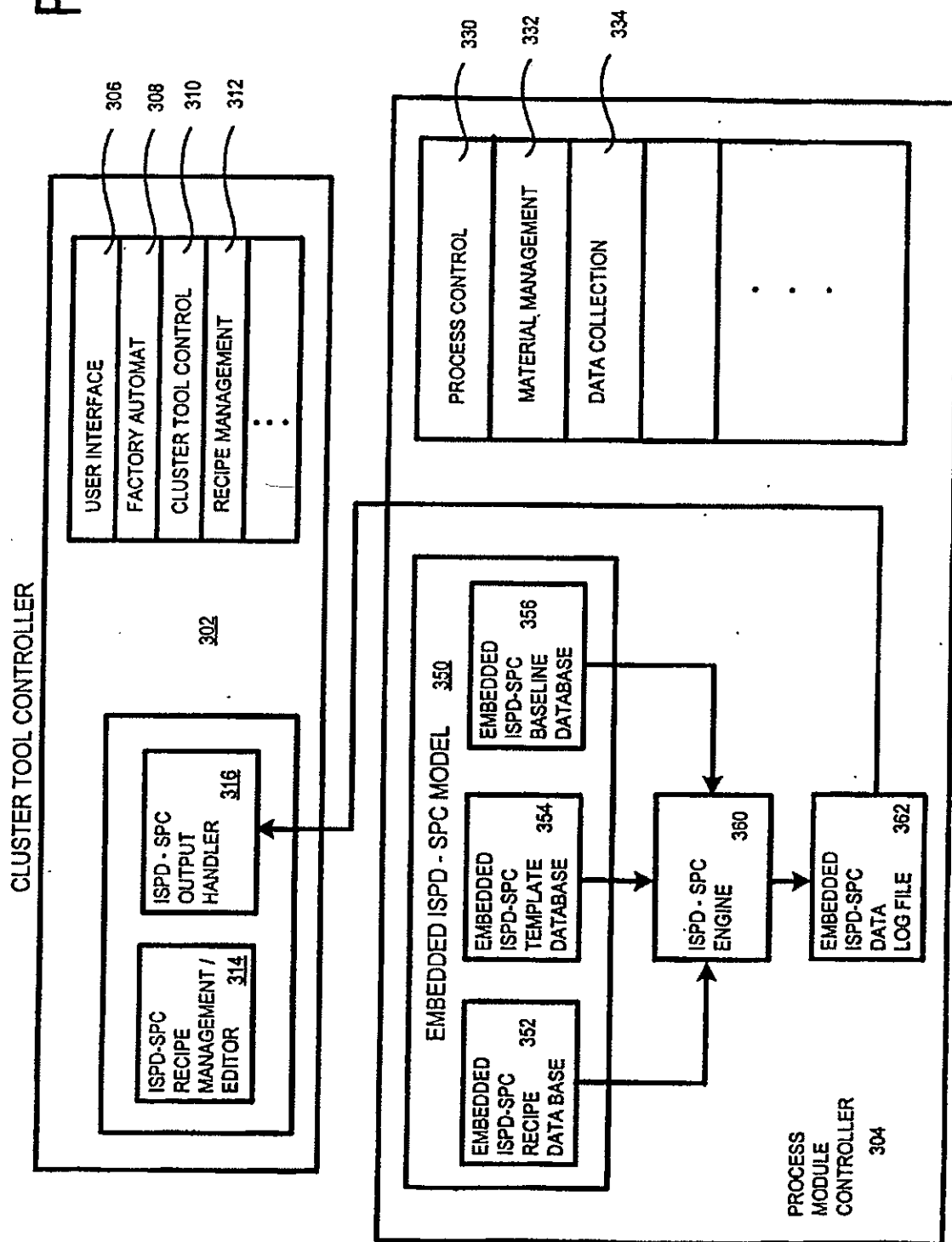


FIG. 2B

FIG. 3

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Step	1	2	3	4	5	6
Description	(Strike)	BARC	HARC	BARC	Trench	He Only
WAP (mT)	120	60	45	100	150	1
RF 2MHz (W)	0	0	0	0	0	0
RF 27MHz (W)	0	0	0	0	0	0
Ar	150	100	100	0	500	0
O2 (small)	10	8	10	7	10	0
O2 (large)	50	60	0	350	0	0
C4F8	0	0	15	0	0	0
He (Torr)	0	0	0	0	0	0
Completion	time	time	time	time	time	time
Time	20	30	30	30	30	20
Conf Ring Preset	0*	0	0	0	0	0
WAP Hold Delay	2	0	0	0	0	0
WAP Control Mode	Pressure	Pressure	Pressure	Pressure	Pressure	Transfer
Nominal Conf Ring Pos	630 - 670	610 - 650	600 - 640	610 - 650	610 - 650	

FIG. 4A

Step	1	2
Description	chuck	dechuck
WAP (mT)	1	1
RF 2MHz (W)	0	0
RF 27MHz (W)	0	0
Ar	0	0
O2	0	0
C4F8	0	0
He (Torr)	20	5
Completion	time	time
Time	20	10
WAP Control Mode	Transfer	Transfer
Nominal He flow (sccm)	< 5	> 3
Nominal He Pressure (Torr)	20	5

FIG. 4B

To
FIG. 4C-2

FIG. 4C-1

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FIG. 4C-1

FIG. 4C-2

Step	1	2	3	4	5	6	7	8	9	10
Description	Stabilize	Strike	Low 2. Low 27	High 2. High 27	Low 2. High 27	High 2. Low 27	High 2. High 27	Med.2 Med. 27	Stabilize for Tap Change	Modify Tap
WAP (mT)	125	125	100	100	100	100	100	65	65	125
RF 2MHz (W)	0	500	500	2000	500	2000	2000	1250		0
RF 27MHz (W)	0	500	500	1500	1500	500	1500	100	30	0
Ar	200	200	200	200	200	200	200	150	150	200
O2	10	10	10	10	10	10	10	10	10	10
C4F8	15	15	15	15	15	15	15	15	15	15
He (Torr)	20	20	20	20	20	20	20	20	20	20
Completion	time	time	time	time	time	time	time	time	time	time
Time	15	6	30	30	30	30	30	50	4	15
Conf Ring Preset	0*	661	642	640	640	640	640	0*	640	640
WAP Hold Delay	2	0	0	0	0	0	0	2	0	0
WAP Control Mode	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
2MHz Lap	3	3	3	3	3	3	3	3	3	1
27MHz Lap	12	12	12	12	12	12	12	12	12	14
RF 2MHz Max Reflect Coef	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
RF 27MHz Max Reflect Coef	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
RF 27MHz Ramp Time (msec)	2000	2000	2000	2000	2000	2000	2000	2000	1000	2000
Valve Preset Position	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Filter	down	down	down	down	down	down	down	down	down	down
Nominal Bias Voltage (+/- 50v)			-575	-780	-665	-725	-780	-760		
Nominal Conf Ring Pos			625-675	625-675	625-675	625-675	625-675	600-650		
2MHz Reflected Power			<15W	<120W	<50W	<25W	<120W	<20W		
27MHz Reflected Power			<15W	<25W	<15W	<15W	<25W	<15W		

FIG. 4C-2

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11	12	13	14	15	16	17	18	19	20
Strike	Low 27	High 27	Low 27	Low 27	High 27	He Rampdown	Plasma Dechuck	Plasma Off	Pins Up
125	30	30	30	30	30	45	45	45	1
500	500	2000	500	2000	500	0	0	0	0
500	500	1500	1500	500	1500	30	30	0	0
200	100	100	100	100	100	125	125	100	100
10	10	10	10	10	10	0	0	0	0
15	15	15	15	15	15	0	0	0	0
20	20	20	20	20	20	20	5	5	5
time	time	time	time	time	time	time	time	time	stabl
6	30	30	30	30	30	15	10	2	30
640	640	640	640	640	640	640	640	640	0
0	2	0	0	0	0	0	0	0	0
Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Transfer
1	1	1	1	1	1	1	1	1	1
14	14	14	14	14	14	14	14	14	14
0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
2000	2000	2000	2000	2000	2000	1000			
1000	1000	1000	1000	1000	1000	1000	1000	1000	
down	down	down	down	down	down	down	down	down	up
	-620	-880	-825	-560	-880				
	450-540	450-540	450-540	450-540	450-540				
	<40W	<35W	<20W	<100W	<70W				
	<30W	<40W	<40W	<30W	<40W				

From
FIG. 4C-1

FIG. 4C-1

FIG. 4C-2

