

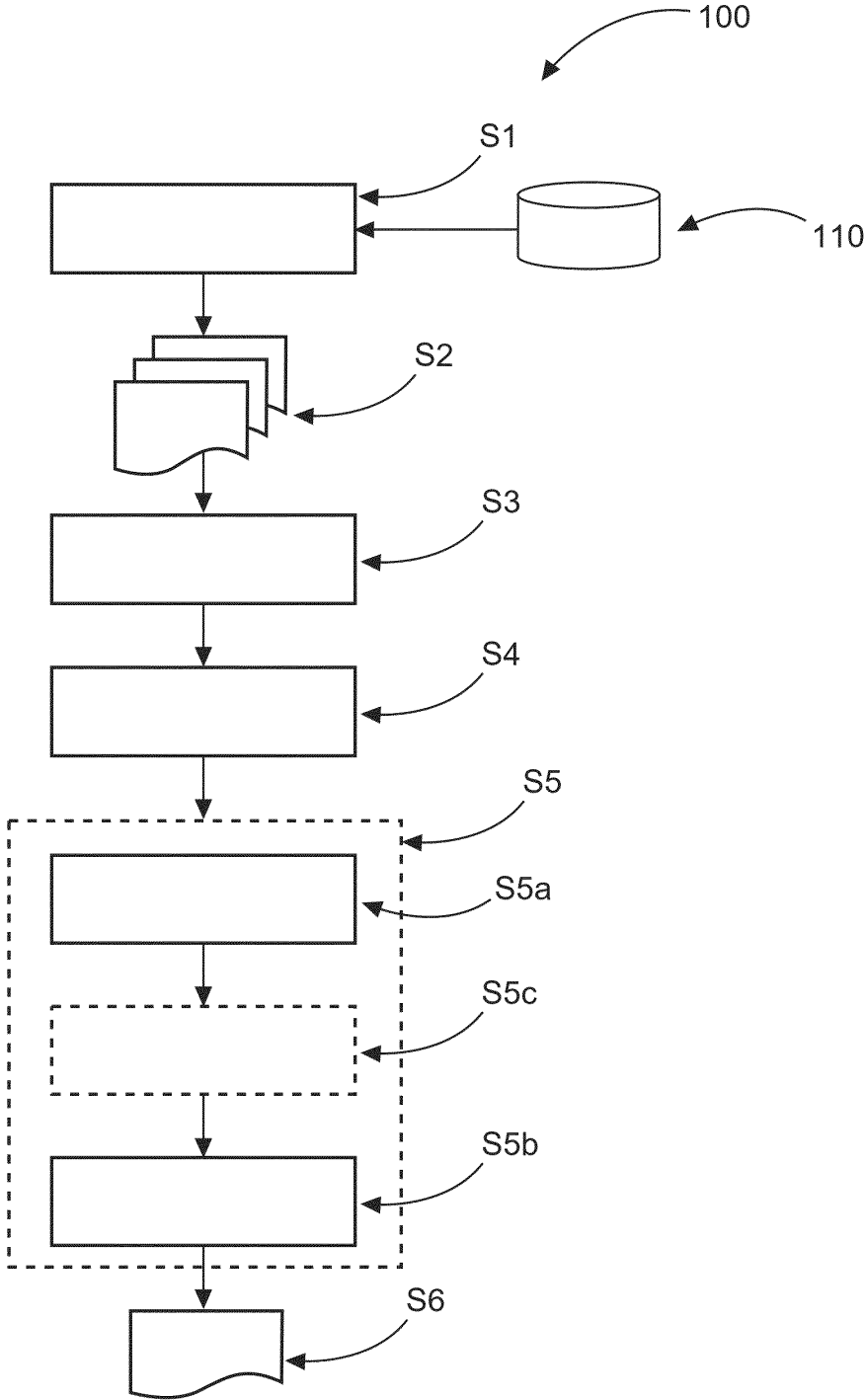
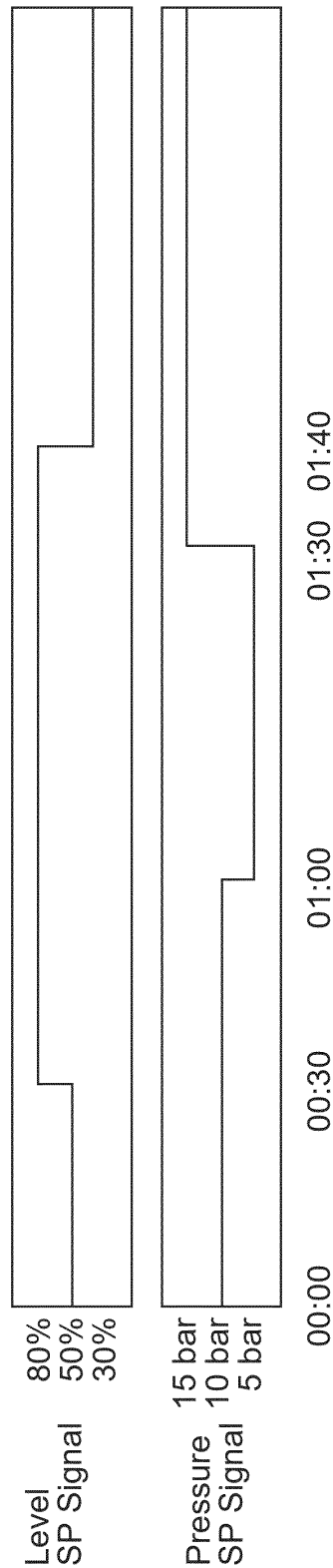


FIG. 1



a)

Time	Event/Action
2019-12-04 00:30	Level SP 50% → 80%
2019-12-04 01:00	Pressure SP 10bar → 5bar
2019-12-04 01:30	Pressure SP 5bar → 15bar
2019-12-04 01:40	Level SP 80% → 30%

b)

FIG. 2

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Procedure Instance 1 Start = 2019-12-04 9:08:00 End = 2019-12-04 9:16:30			Procedure Instance 2 Start = 2019-17-04 13:15:32 End = 2019-17-04 13:24:12		
Time	Event	Level Value	Time	Event	Level Value
2019-12-04 9:08:00	Closing Valve A	0%	2019-17-04 13:15:32	Closing Valve B	0%
2019-12-04 9:08:02	Valve A = 0	0%	2019-17-04 13:15:32	Valve B = 0	0%
2019-12-04 9:08:15	Closing Valve B	0%	2019-17-04 13:15:47	Closing Valve A	0%
2019-12-04 9:08:17	Valve B = 0	0%	2019-17-04 13:15:49	Valve A = 0	0%
2019-12-04 9:08:30	Closing Valve C	0%	2019-17-04 13:16:02	Open Valve C	0%
2019-12-04 9:08:31	Valve C = 1	0%	2019-17-04 13:16:01	Valve C = 1	0%
2019-12-04 9:09:01	Start pump D	0%	2019-17-04 13:16:12	Start pump D	0%
2019-12-04 9:09:02	Pump = 1	1%	2019-17-04 13:16:13	Pump = 1	1%
2019-12-04 9:09:30	Flow = 100	2%	2019-17-04 13:16:22	Flow = 100	2%
2019-12-04 9:15:21	Flow = 80	50%	2019-17-04 13:23:30	Flow = 80	50%
2019-12-04 9:15:37	Stop pump D	80%	2019-17-04 13:23:45	Flow = 20	80%
2019-12-04 9:15:42	Pump D = 0	80%	2019-17-04 13:24:03	Stop pump D	80%
2019-12-04 9:16:01	Closing Valve C	80%	2019-17-04 13:24:05	Pump D = 0	80%
2019-12-04 9:16:02	Valve C = 0	80%	2019-17-04 13:24:11	Closing Valve C	80%
			2019-17-04 13:24:12	Valve C = 0	80%

FIG. 3a

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Procedure Instance 1				Procedure Instance 2			
Event	Level Value	ID	#	Event	Level Value	ID	#
Closing Valve B	0%	CA	1	Closing Valve B	0%	CA	1
Valve B = 0	0%			Valve B = 0	0%		
Closing Valve A	0%	CB	1	Closing Valve A	0%	CB	1
Valve A = 0	0%			Valve A = 0	0%		
Open Valve C	0%	CC	1	Open Valve C	0%	OC	1
Valve C = 1	0%			Valve C = 1	0%		
Start pump D	0%	StaD	1	Start pump D	0%	Sta D	1
Pump = 1	1%			Pump = 1	1%		
Flow = 100	2%	FU	1	Flow = 100	2%	FU	1
Flow = 80	50%	FD	1	Flow = 80	50%	FD	1
Stop pump D	80%	StoD	1	Flow = 20	69%	FD	2
Pump D = 0	80%			Stop pump D	80%	Sto D	1
Closing Valve C	80%	CC	1	Pump D = 0	80%		
Valve C = 0	80%			Closing Valve C	80%	CC	1
				Valve C = 0	80%		

FIG. 3b

	CB1	CA1	OC1	StaD	Fu1	FD1	StoD	CC
CB1		0	2	2	2	2	2	2
CA1	0		2	2	2	2	2	2
OC1	0	0		2	2	2	2	2
StAD	0	0	0		2	2	2	2
FU1	0	0	0	0		2	2	2
FD1	0	0	0	0	0		2	2
StoD	0	0	0	0	0	0		2
CC	0	0	0	0	0	0	0	



FIG. 4a

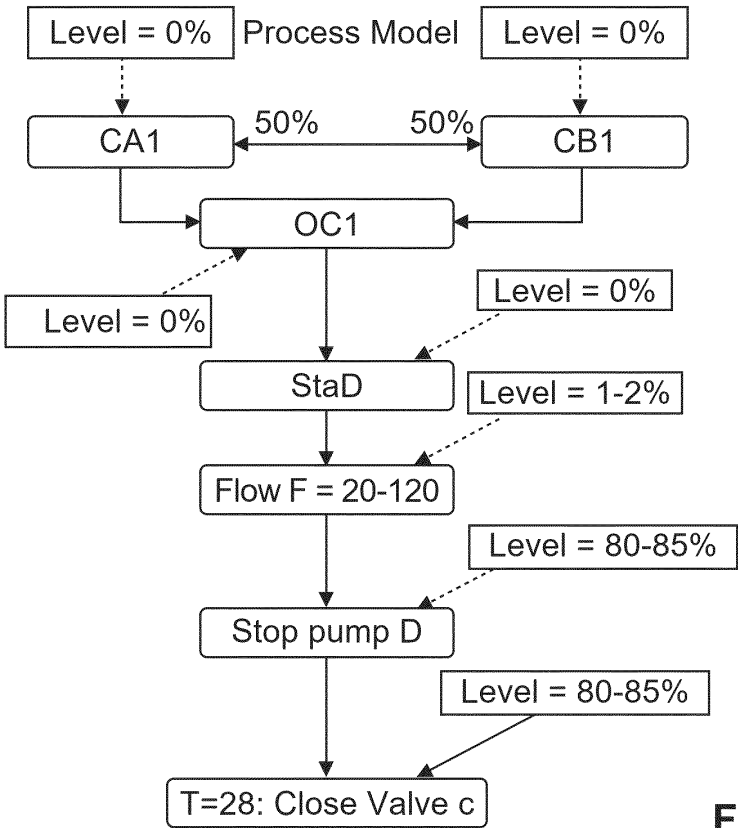


FIG. 4b

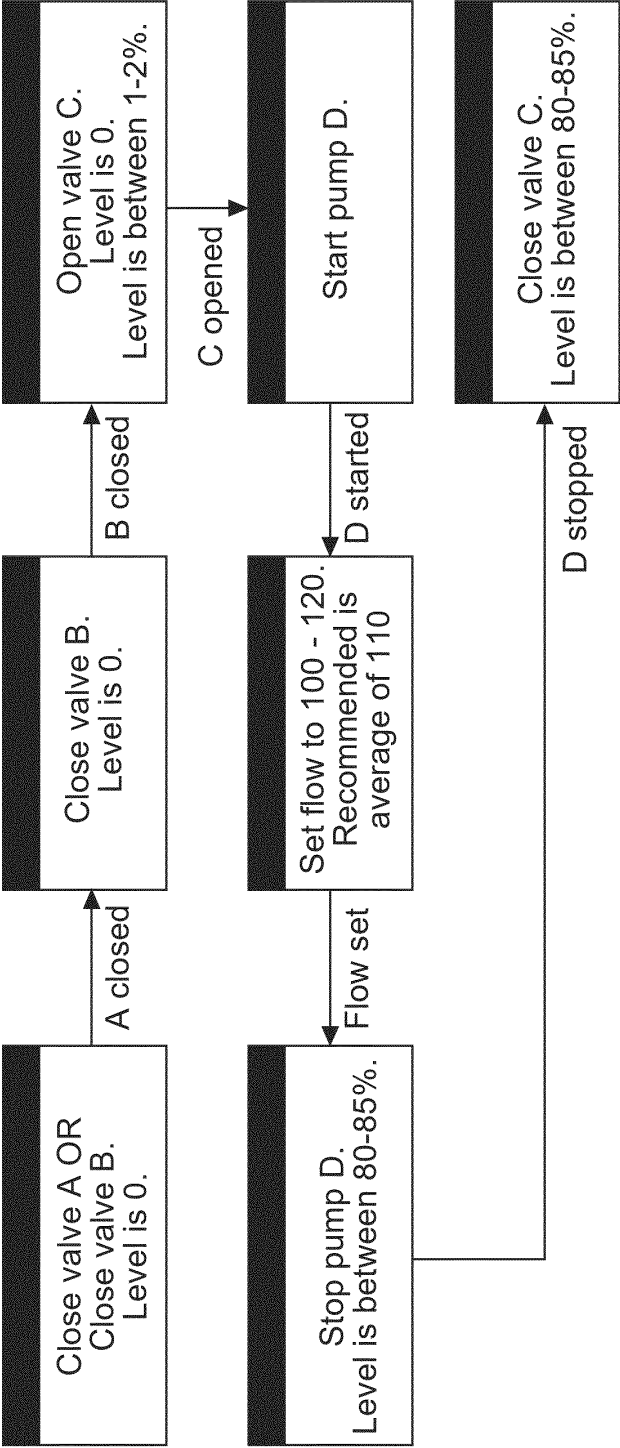


FIG. 5