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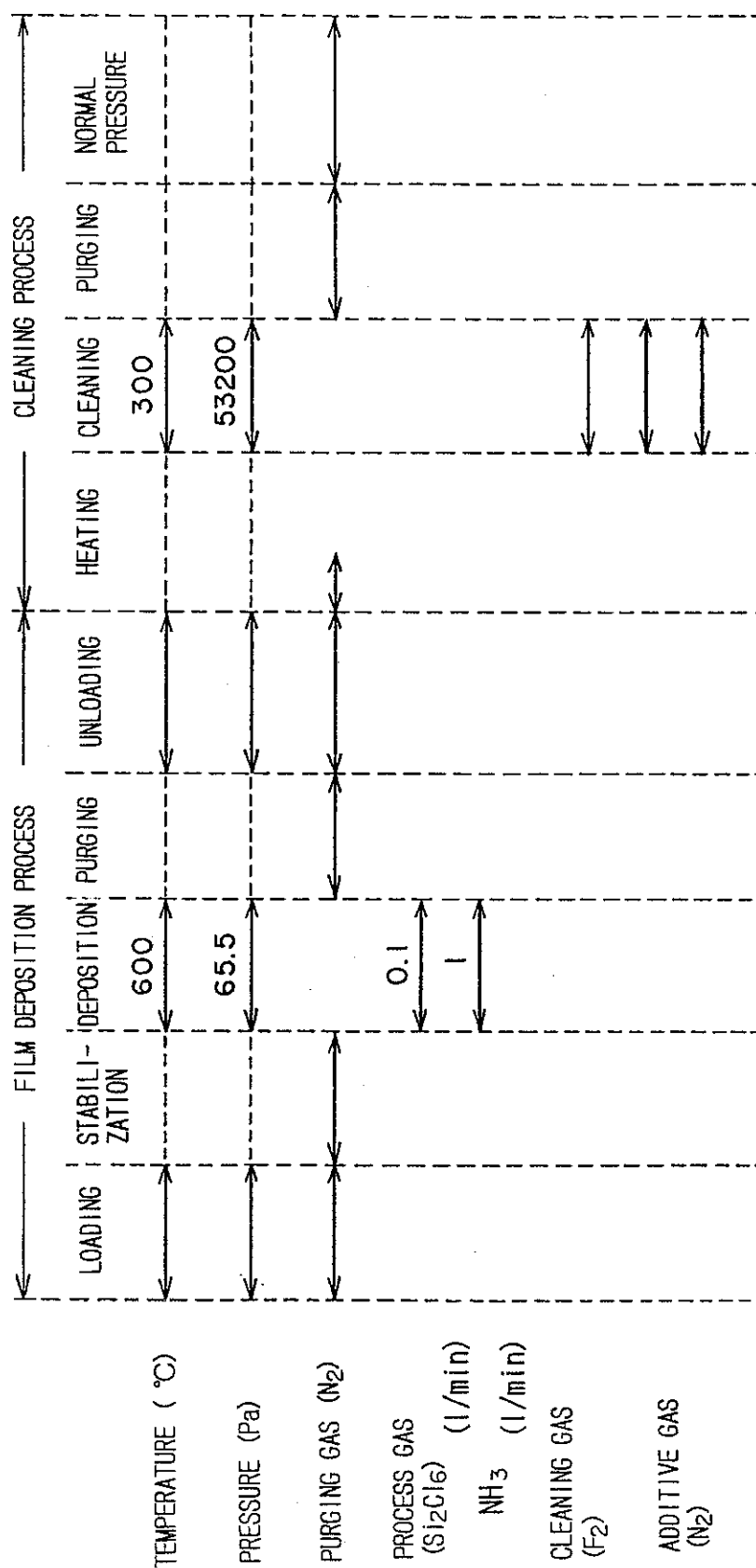


FIG. 2

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	CLEANING CONDITIONS				ETCH RATE			SELECTIVITY	
	TEMPERATURE	F ₂	Cl ₂	N ₂	Si ₃ N ₄	QUARTZ	SiC	Si ₃ N ₄ /QUARTZ	Si ₃ N ₄ /SiC
EXAMPLE 1	300	2	0.35	8	227.5	25.7	30.9	8.8	7.9
COMPARATIVE EXAMPLE 1	300	2	0	8	30.6	3.5	14.7	8.8	2.1
COMPARATIVE EXAMPLE 2	400	2	0	8	313.3	110.7	318.7	2.8	1.0

(°C) (l/min) (nm/min)

FIG. 3

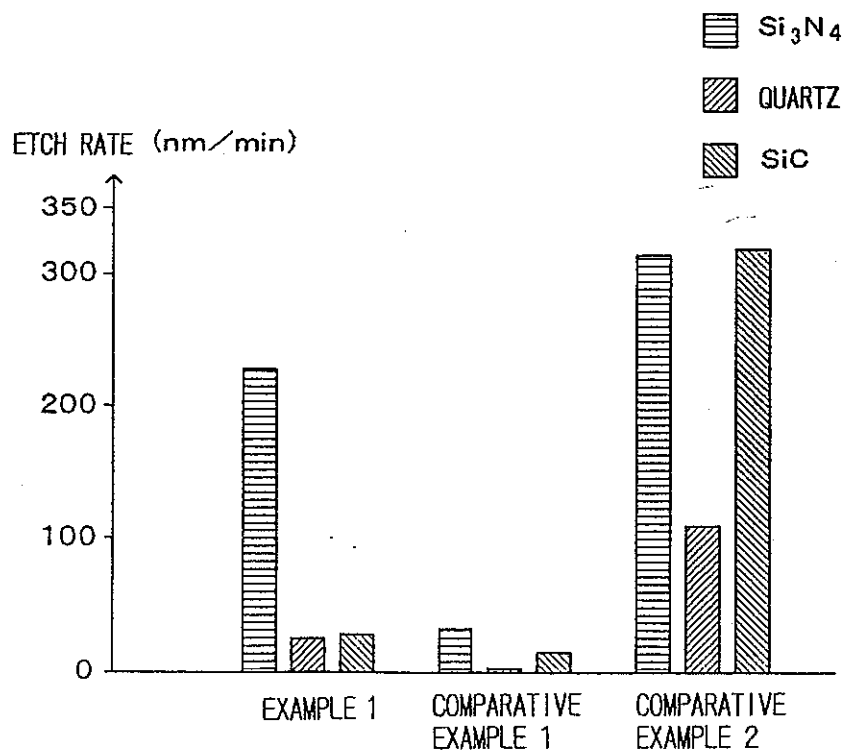


FIG. 4

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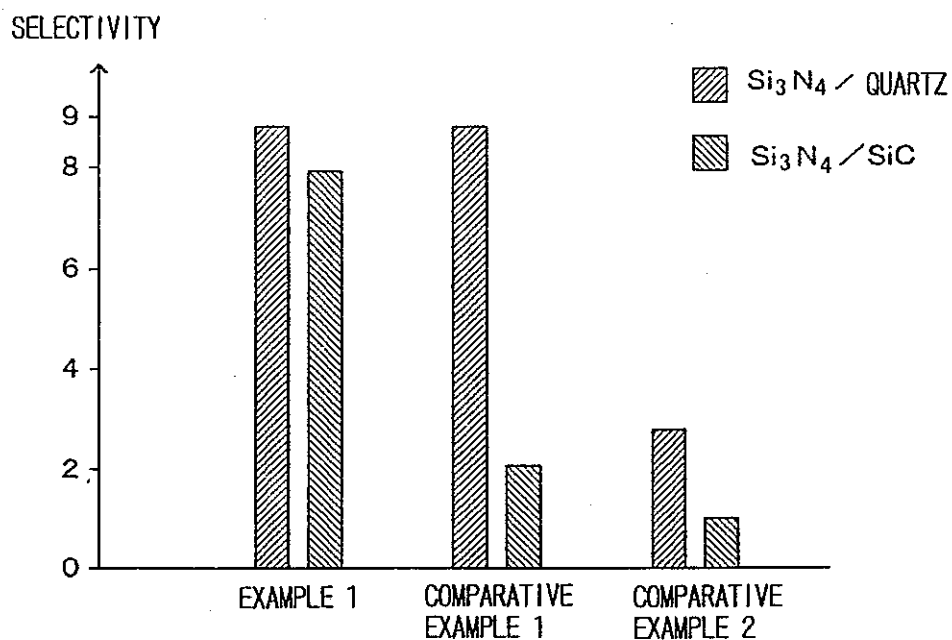


FIG. 5

	CLEANING CONDITIONS				ETCH RATE			SELECTIVITY	
	TEMPERATURE	F ₂	HF	N ₂	Si ₃ N ₄	QUARTZ	SiC	Si ₃ N ₄ /QUARTZ	Si ₃ N ₄ /SiC
EXAMPLE 2	300	1.5	0.5	8	239.5	4.3	5.3	55.7	45.2
EXAMPLE 3	300	1	1	8	285.2	3.3	4.9	86.4	58.2
EXAMPLE 4	300	0.5	1.5	8	244.3	12.1	3.7	20.2	66.0
EXAMPLE 5	300	2	2	8	383.0	2.2	8.9	172.5	43.0
COMPARATIVE EXAMPLE 3	300	0	2	8	54.7	11.6	0.8	4.7	68.4
COMPARATIVE EXAMPLE 4	400	1	1	8	571.8	34.5	131.4	16.6	4.4

(°C) (l/min) (nm/min)

FIG. 6

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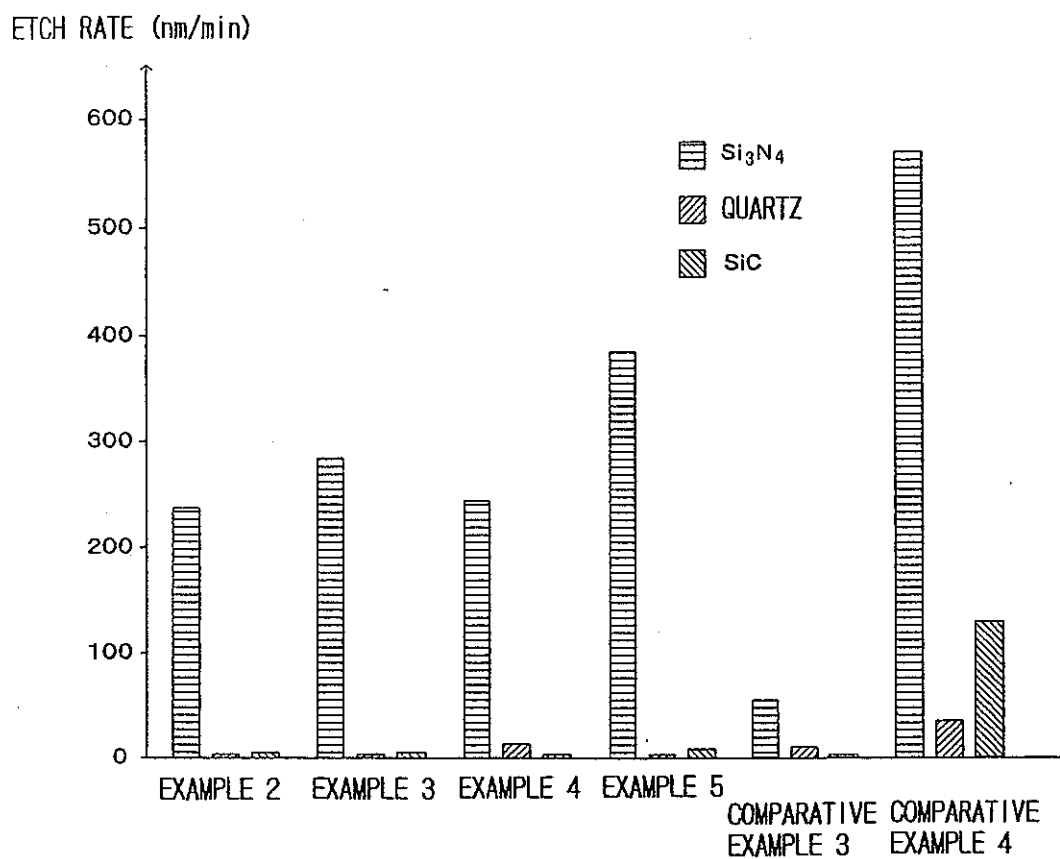


FIG. 7

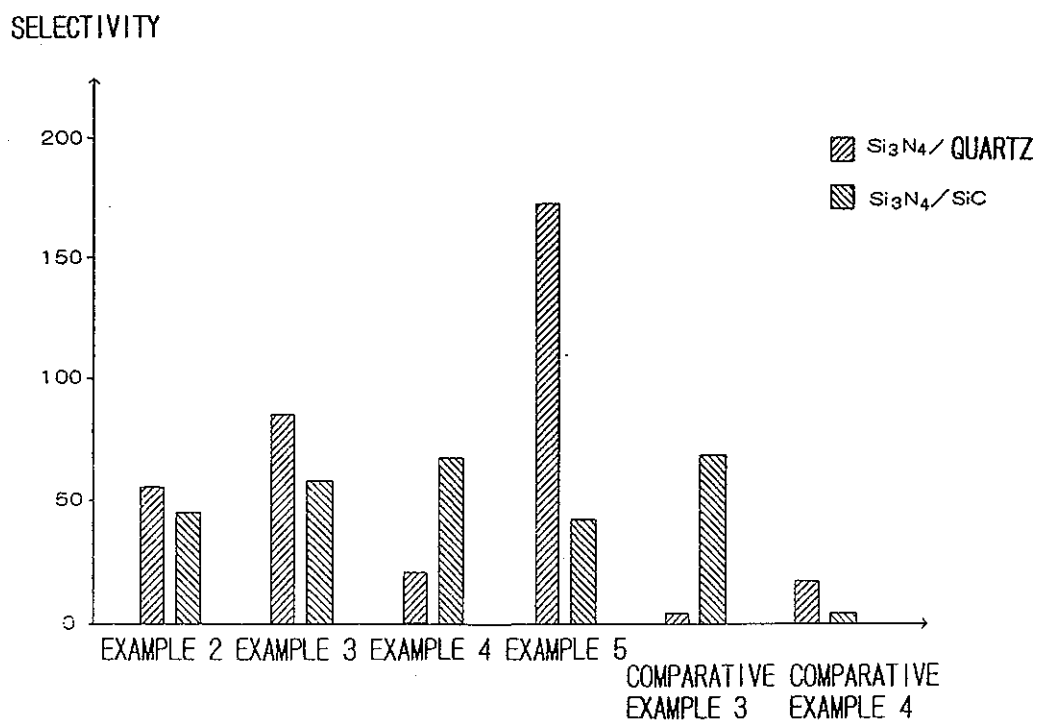


FIG. 8

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	TEMPERATURE	CLEANING CONDITIONS			ETCH RATE			SELECTIVITY	
		F ₂	NH ₃	N ₂	Si ₃ N ₄	QUARTZ	SiC	Si ₃ N ₄ /QUARTZ	Si ₃ N ₄ /SiC
EXAMPLE 6	300	1.78	0.17	8.05	196	7.1	6.5	27.6	30.2
EXAMPLE 7	300	1.55	0.34	8.1	264.7	4.7	6.9	56.3	38.4
EXAMPLE 8	300	1.32	0.53	8.16	206.5	11	12.3	18.8	16.8

(°C) (l/min) (nm/min)

FIG. 9

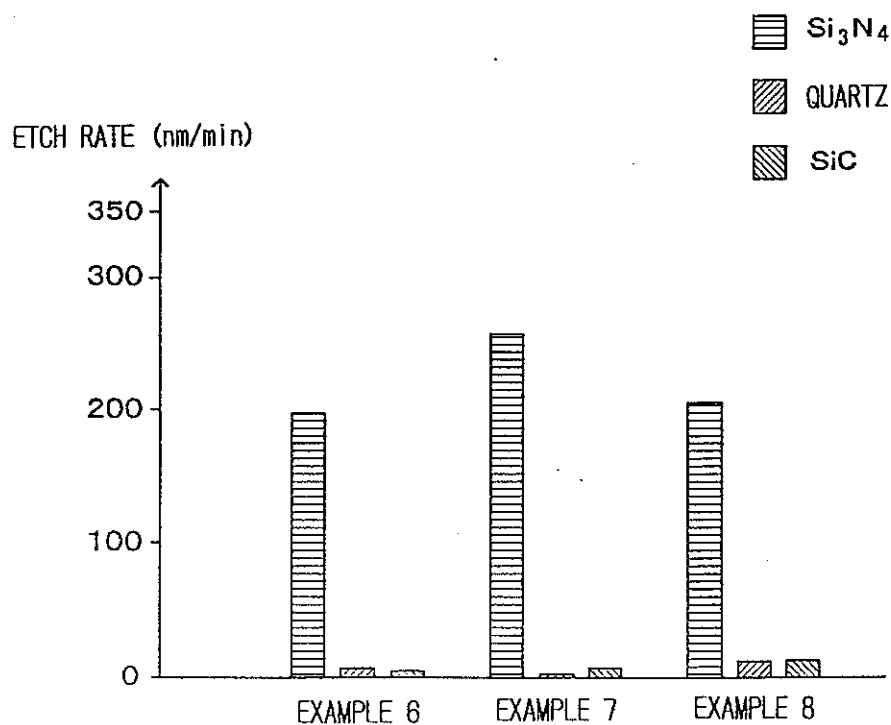


FIG. 10

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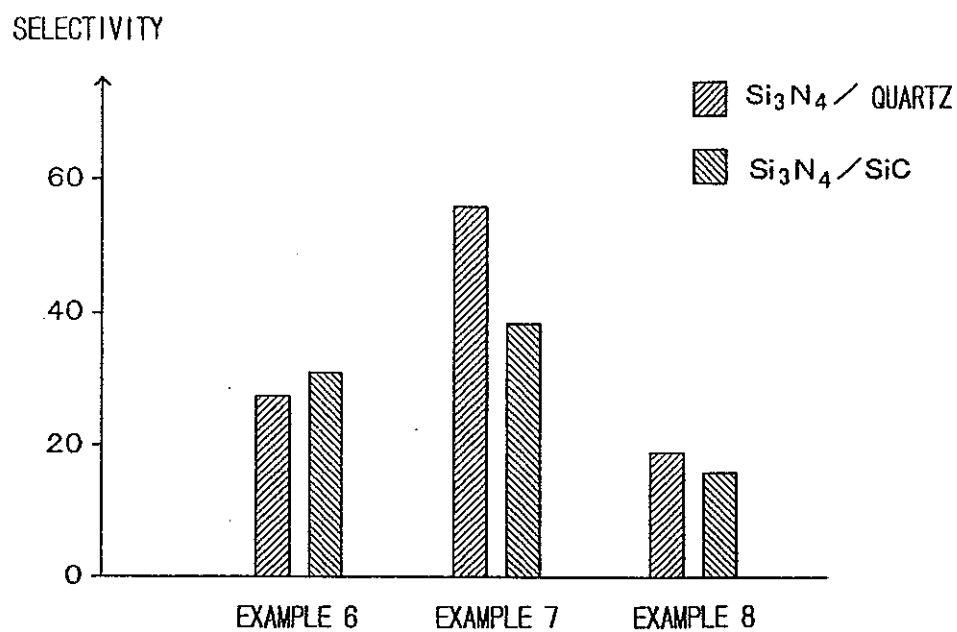


FIG. 11

TEMPERATURE	CLEANING CONDITIONS				ETCH RATE			SELECTIVITY	
	F ₂	H ₂	N ₂	Si ₃ N ₄	QUARTZ	SiC	Si ₃ N ₄ /QUARTZ	Si ₃ N ₄ /SiC	
EXAMPLE 9	300	1.75	0.37	8	264	5.5	4.1	48	64.4
EXAMPLE 10	300	1.5	0.61	8	285	7.2	4.5	39.6	63.3
EXAMPLE 11	300	1.25	0.75	8	246	3.9	4.2	63.1	58.6

(°C) (l/min) (nm/min)

FIG. 12

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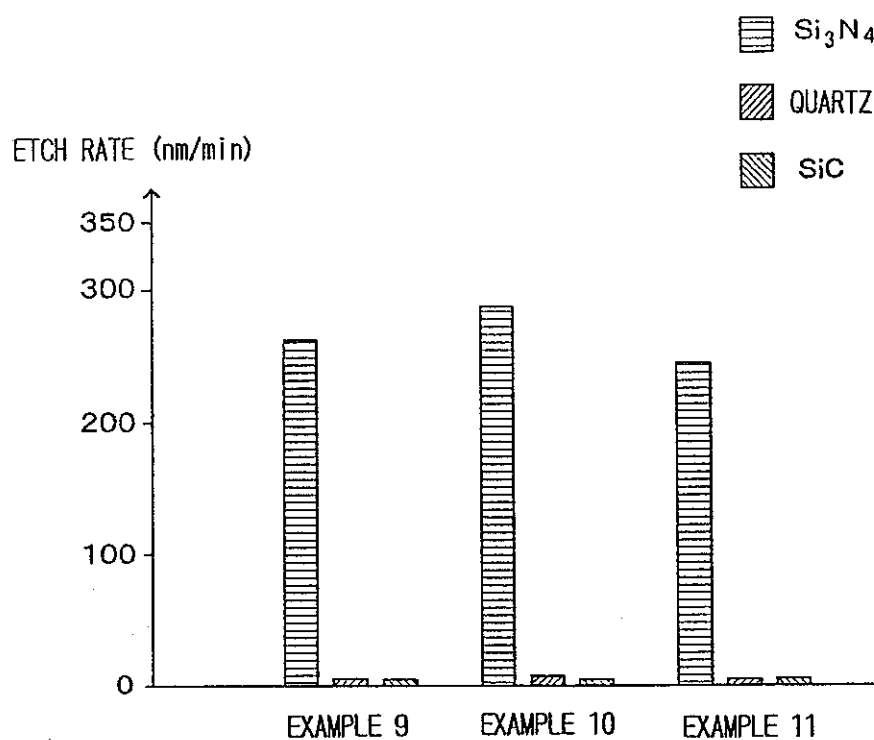


FIG. 13

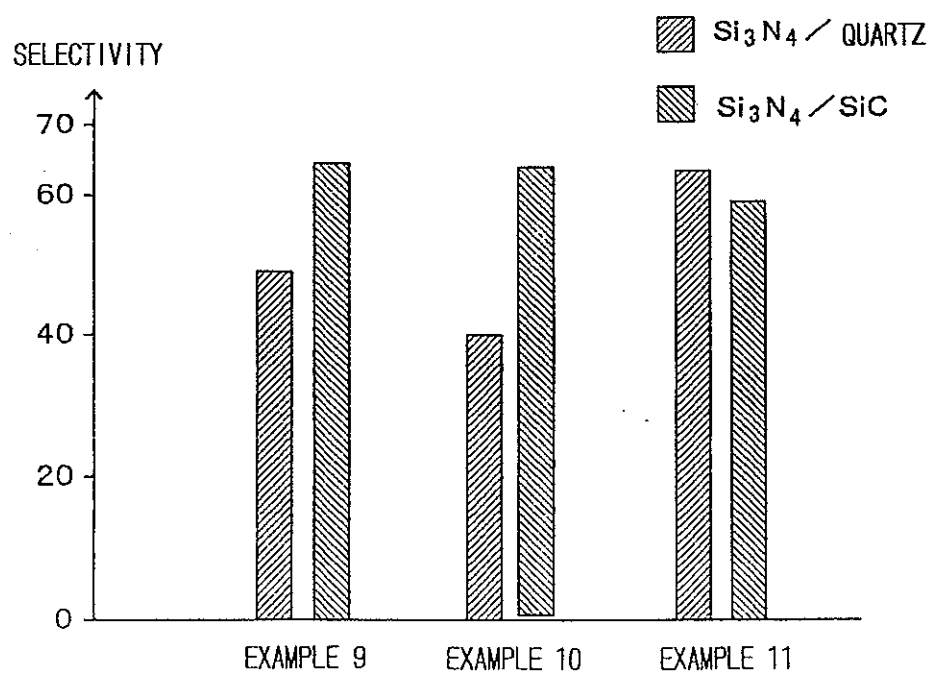


FIG. 14

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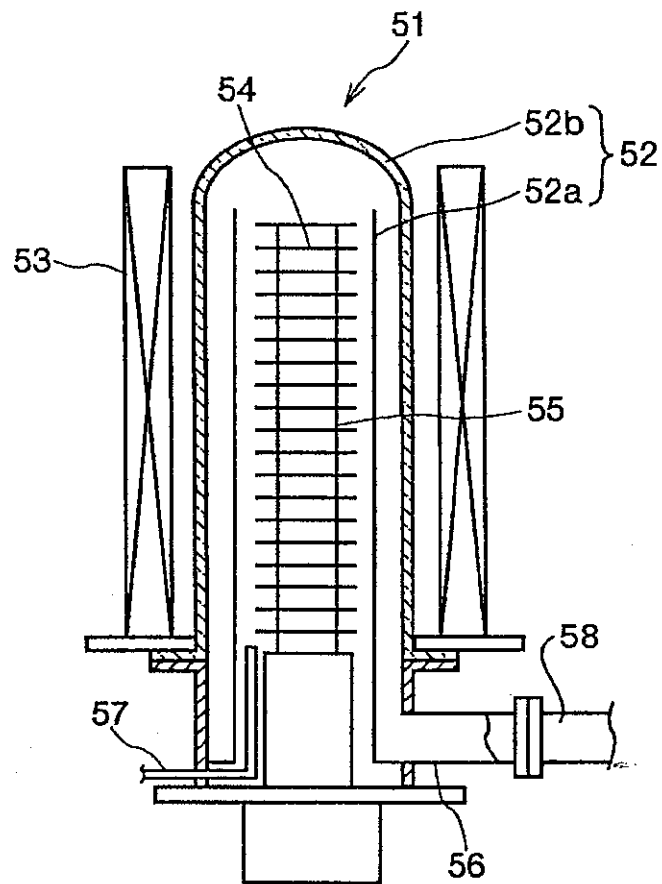


FIG. 15