

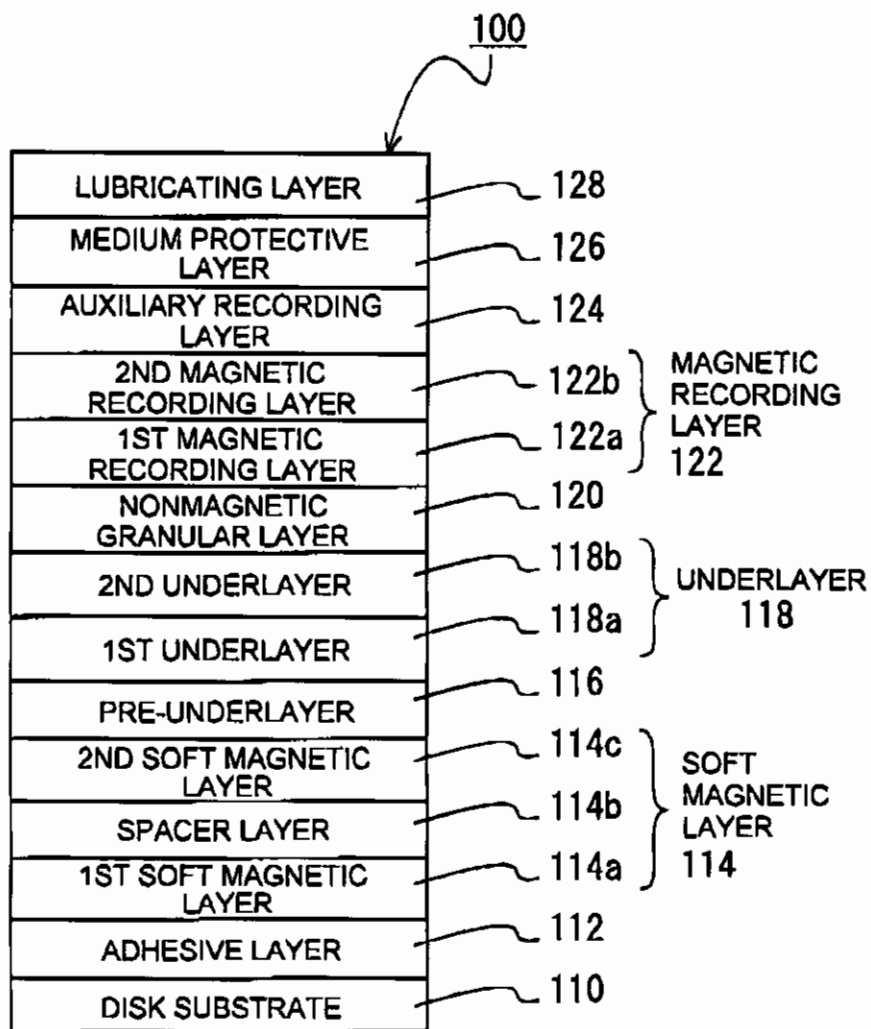


FIG. 1

Standard free energies of formation of oxides ($-\Delta G = -RT \ln P_{O_2}$): KJ/mol O_2

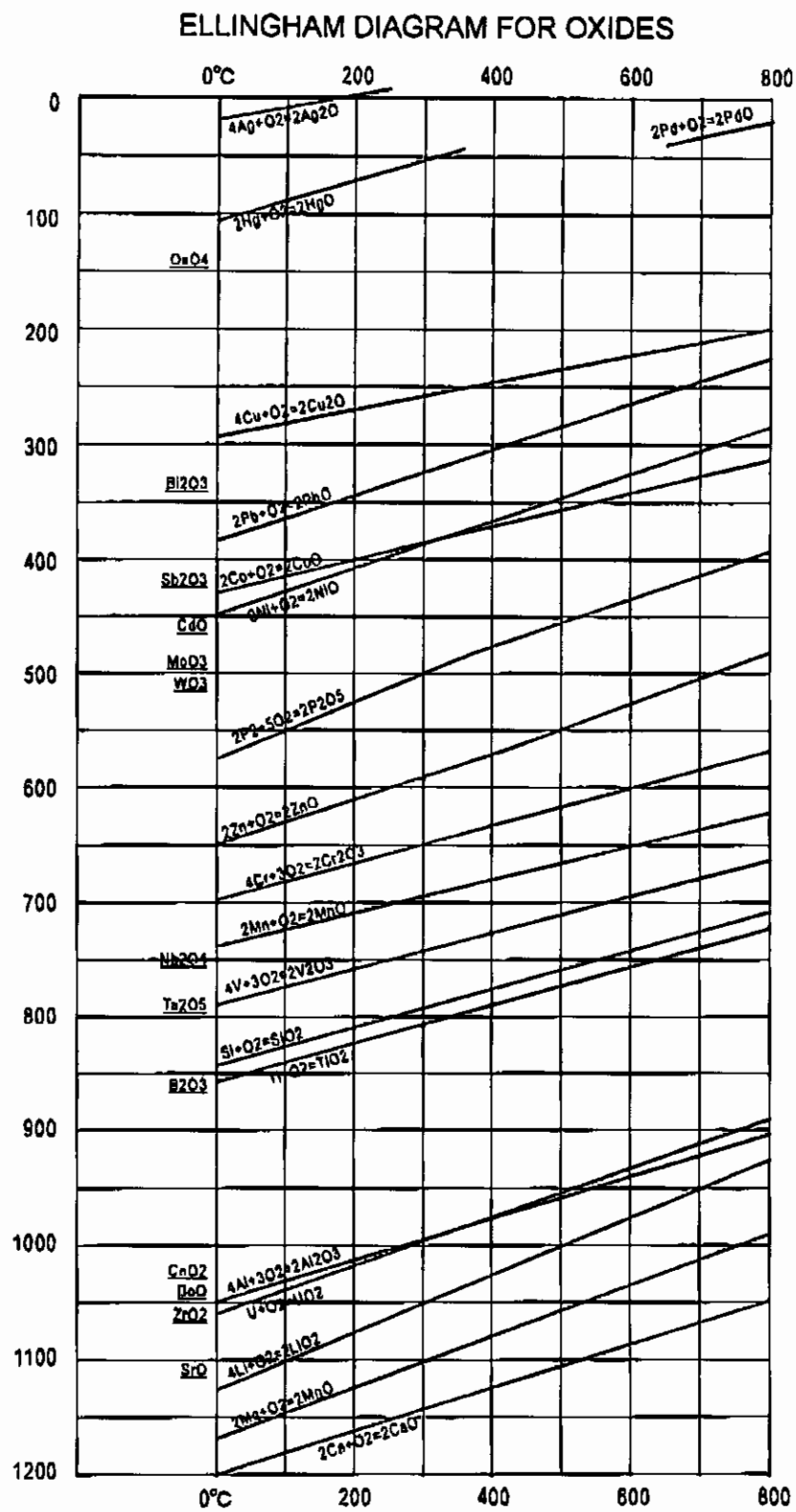
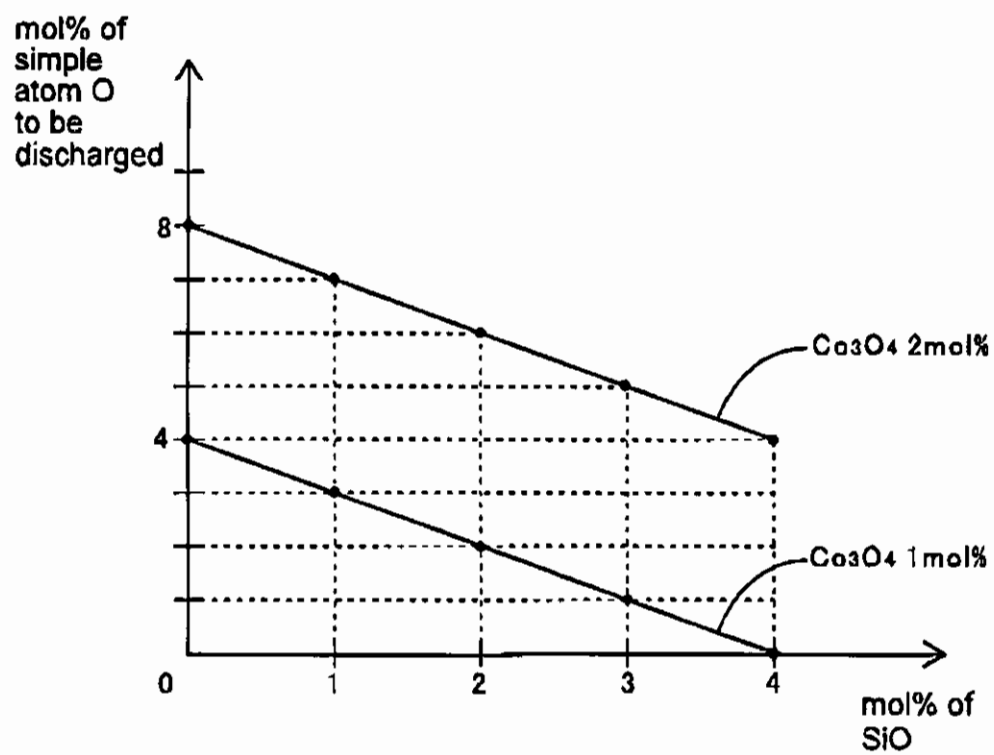


FIG. 2



Amount of O to be discharged depending on contents of Co_3O_4 and SiO

FIG. 3

	COMPOSITION	ADDITION AMOUNT OF Co_3O_4	SNR	DIFFERENCE FROM REFERENCE VALUE
EXAMPLE	$(89-x)(70\text{Co}-13\text{Cr}-17\text{Pt})-5(\text{SiO}_2)-5(\text{TiO}_2)-x(\text{Co}_3\text{O}_4)-1(\text{SiO})$	0mol% (classified into Comparative Example)	17.3	0
		1mol%	18.25	0.95
		2mol%	18.2	0.9
		3mol%	18.1	0.8
		4mol%	17.8	0.5
		5mol%	17.5	0.2
COMPARATIVE EXAMPLE	$(90-x)(70\text{Co}-13\text{Cr}-17\text{Pt})-5(\text{SiO}_2)-5(\text{TiO}_2)-x(\text{Co}_3\text{O}_4)$	0mol%	17.8	0
		1mol%	18.2	0.6
		2mol%	18.1	0.5
		3mol%	17.2	-0.4
		4mol%	17	-0.6
		5mol%	-	-

FIG. 4A

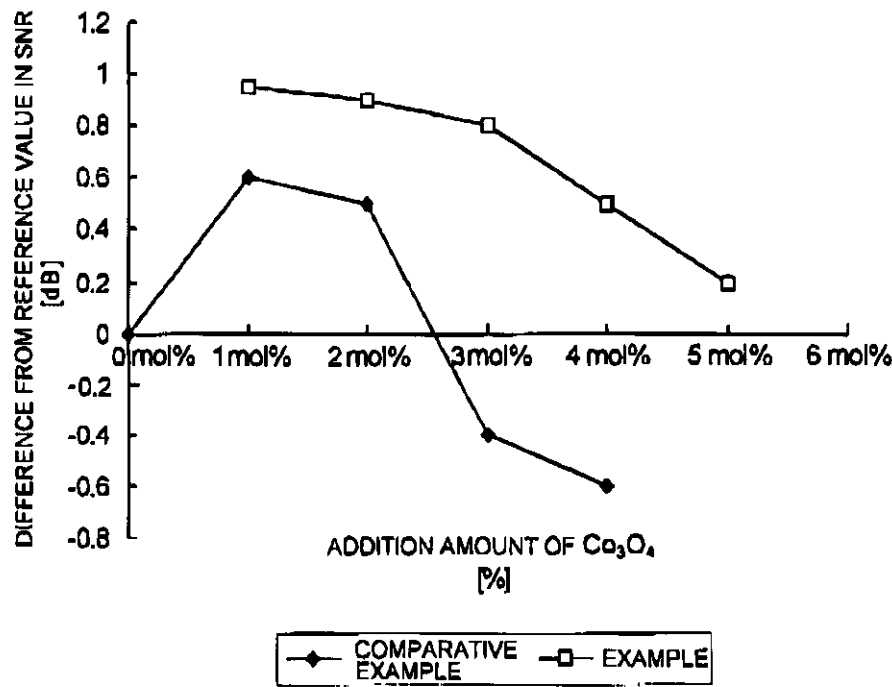


FIG. 4B

	COMPOSITION
EXAMPLE	$(87-y)(70\text{Co}-13\text{Cr}-17\text{Pt})-5(\text{SiO}_2)-5(\text{TiO}_2)-3(\text{Co}_3\text{O}_4)-y(\text{SiO})$
Co_3O_4 (3mol%)	
ADDITION AMOUNT OF SiO	SNR (DIFFERENCE FROM REFERENCE VALUE)
0 mol%	0.0
1 mol%	1.1
2 mol%	0.5
3 mol%	-0.1

← COMPARATIVE EXAMPLE

← EXAMPLE

FIG. 5A

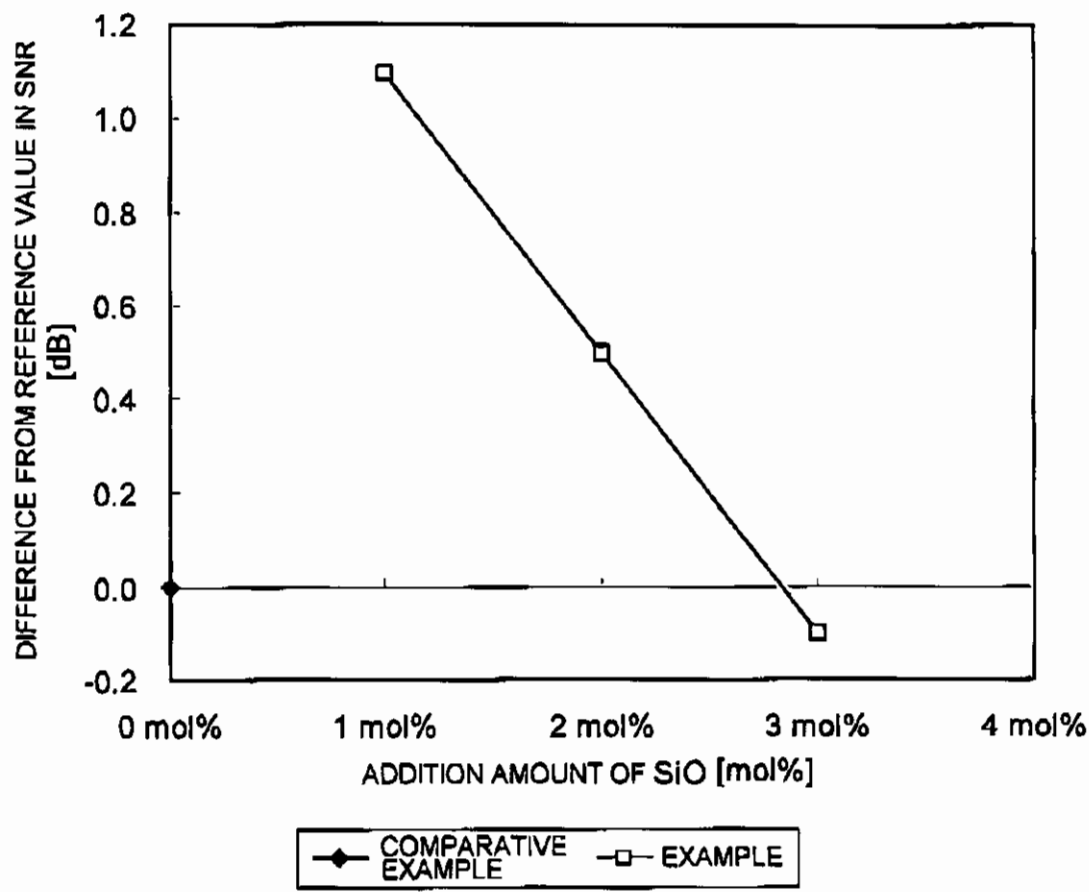


FIG. 5B