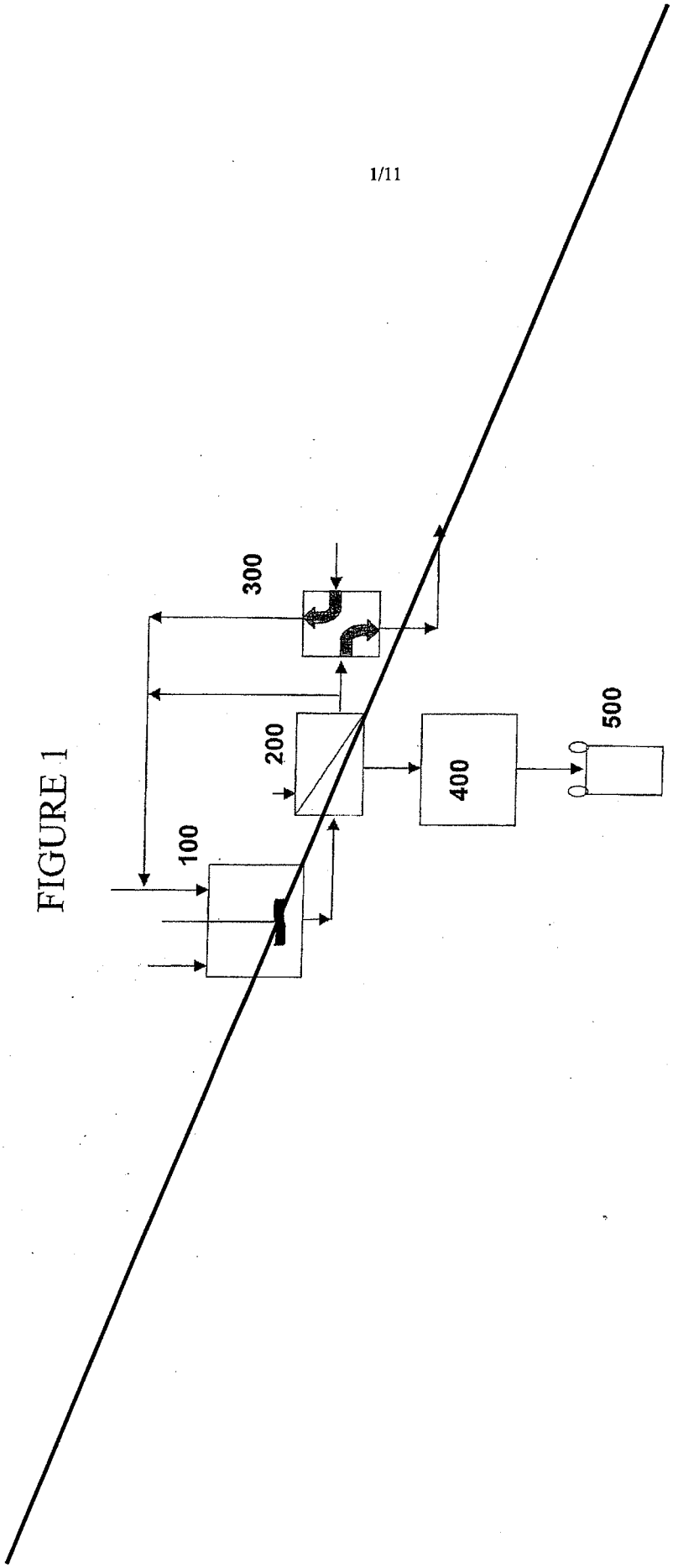
FIGURE 1



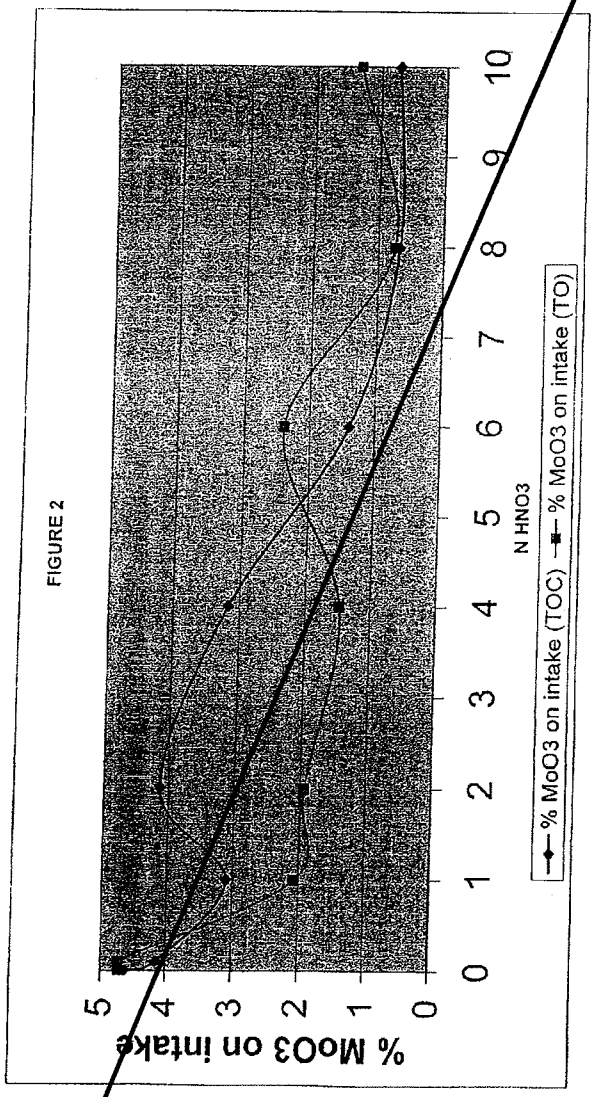

% MoO3 on intake
0
1
2
3
4
5
0
1
2
3
4
5
6
7
8
9
10
N HNO3
% MoO3 on intake (TOC)
% MoO3 on intake (TO)

FIGURE 2

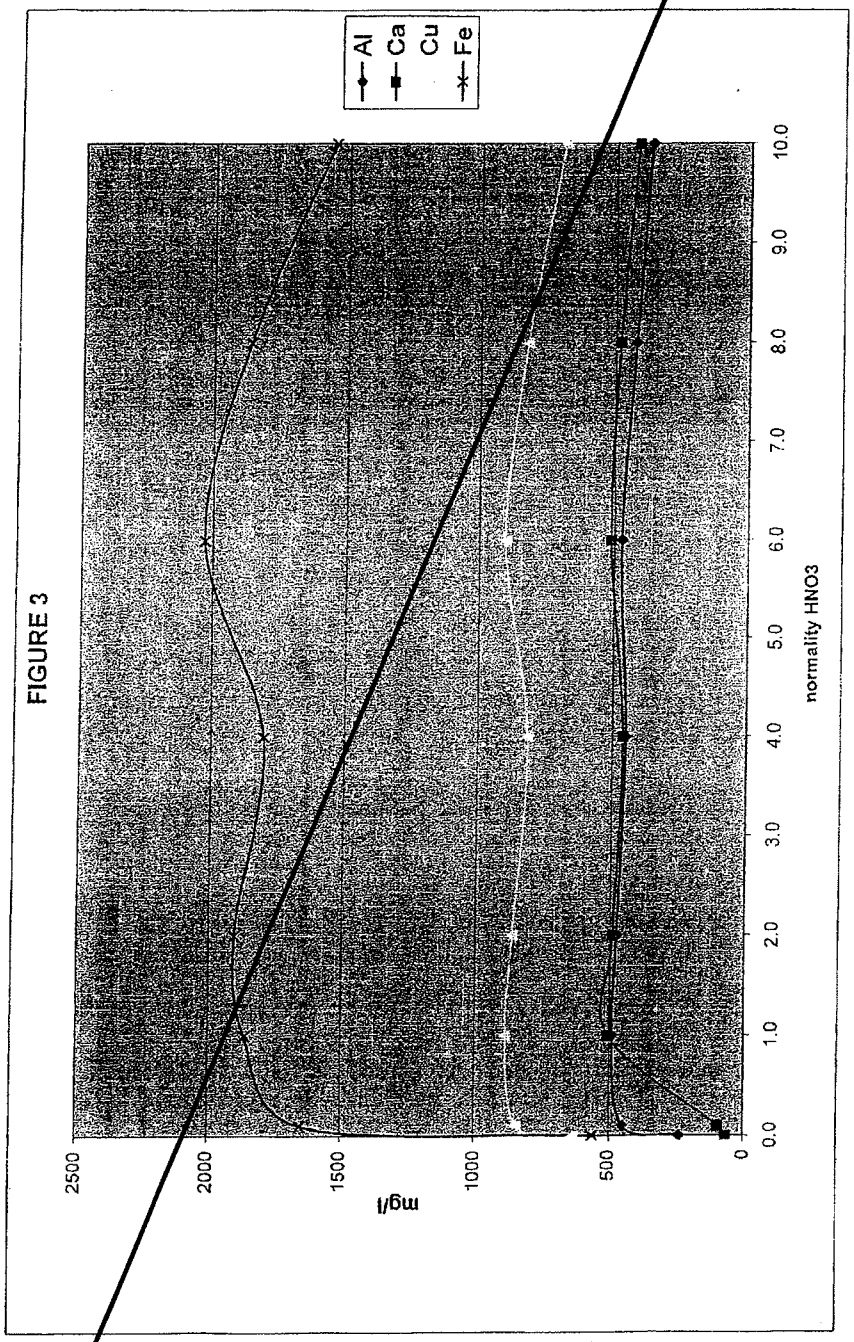

Al
Ca
Cu
Fe
mg/l
2500
2000
1500
1000
500
0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
normality HNO3

FIGURE 3

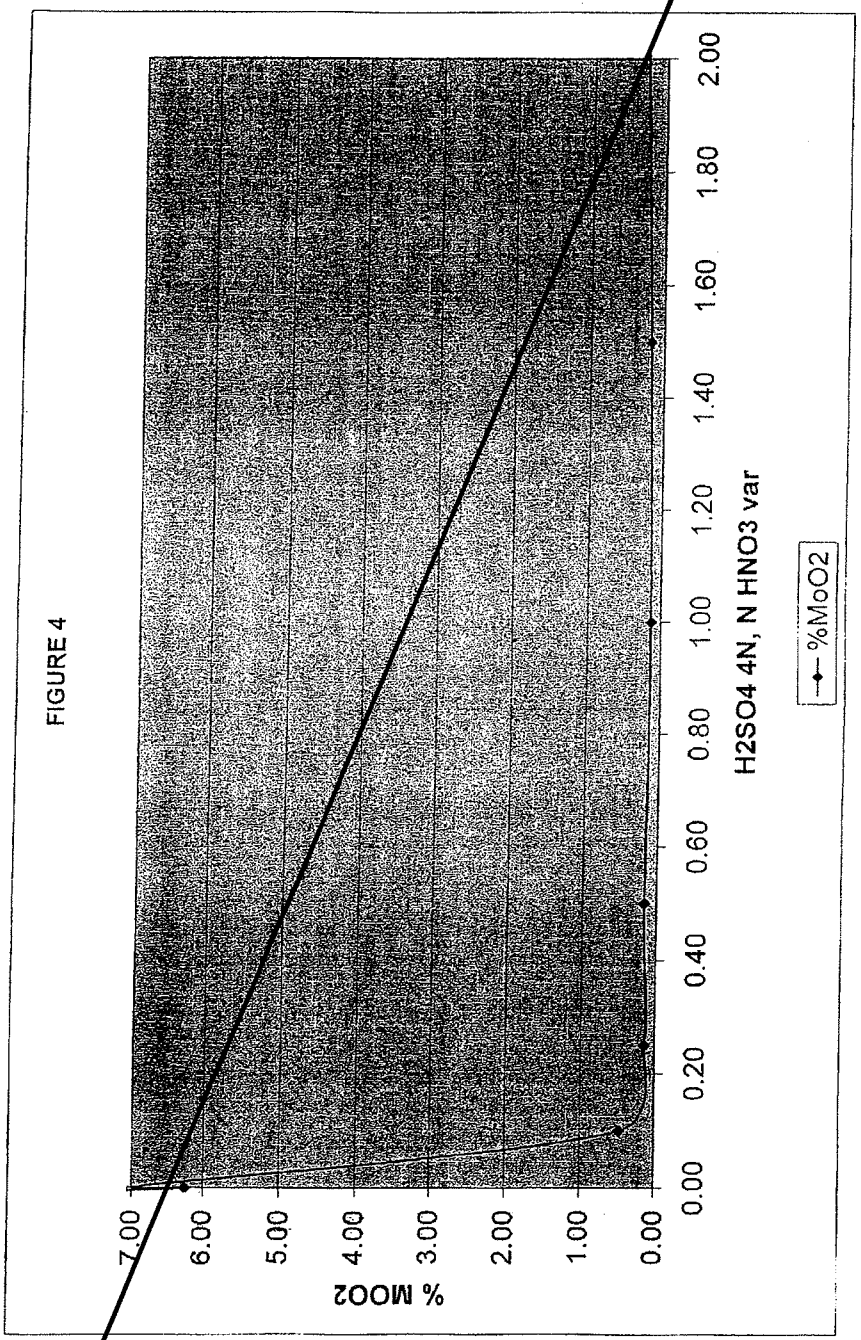


FIGURE 4
% MOO2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
H2SO4 4N, N HNO3 var
0.00
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80
2.00
%MoO2

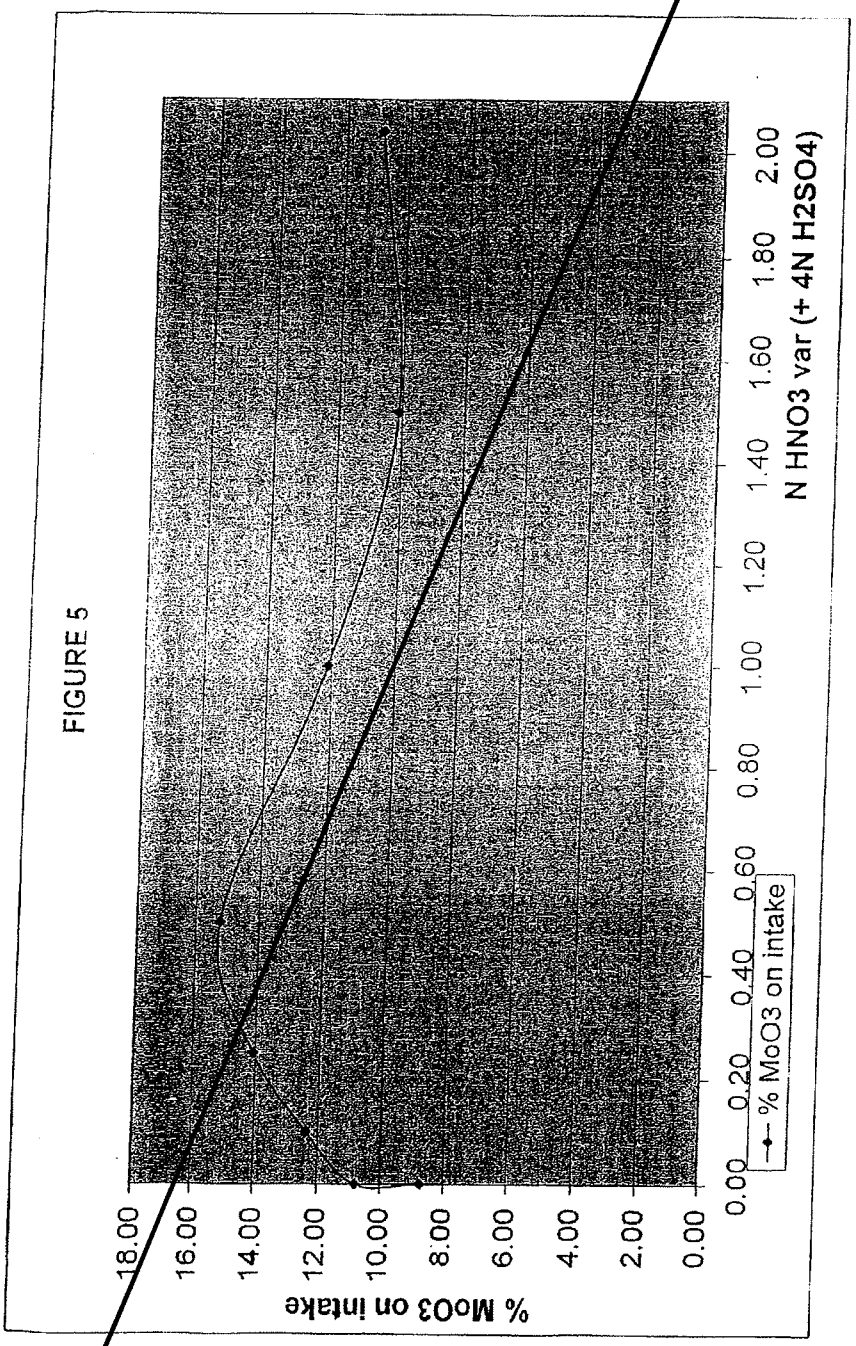

% MoO3 on intake
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.00
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80
2.00
N HNO3 var (+ 4N H2SO4)
% MoO3 on intake

FIGURE 5

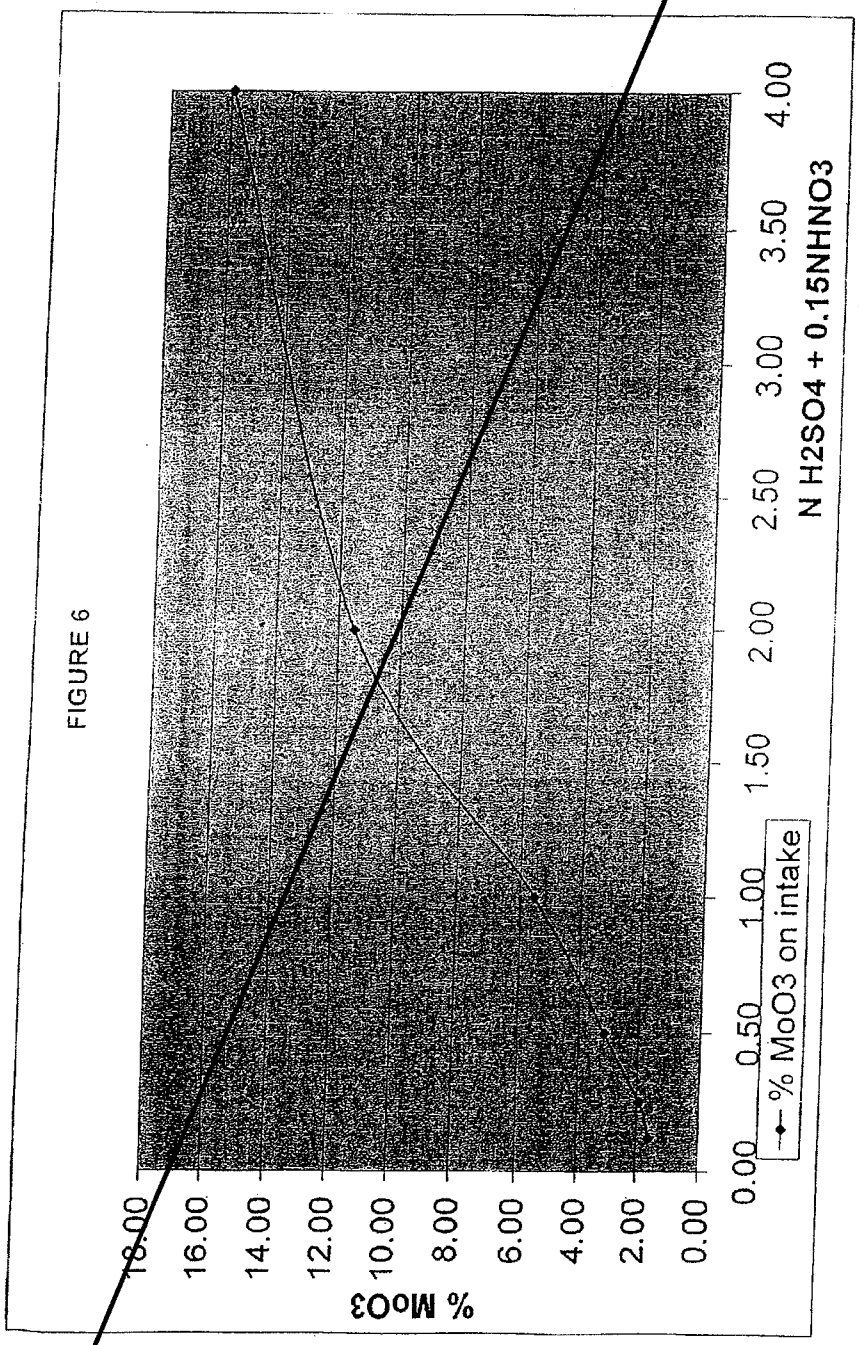

% MoO3
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2SO4 + 0.15NHNO3
% MoO3 on intake

FIGURE 6

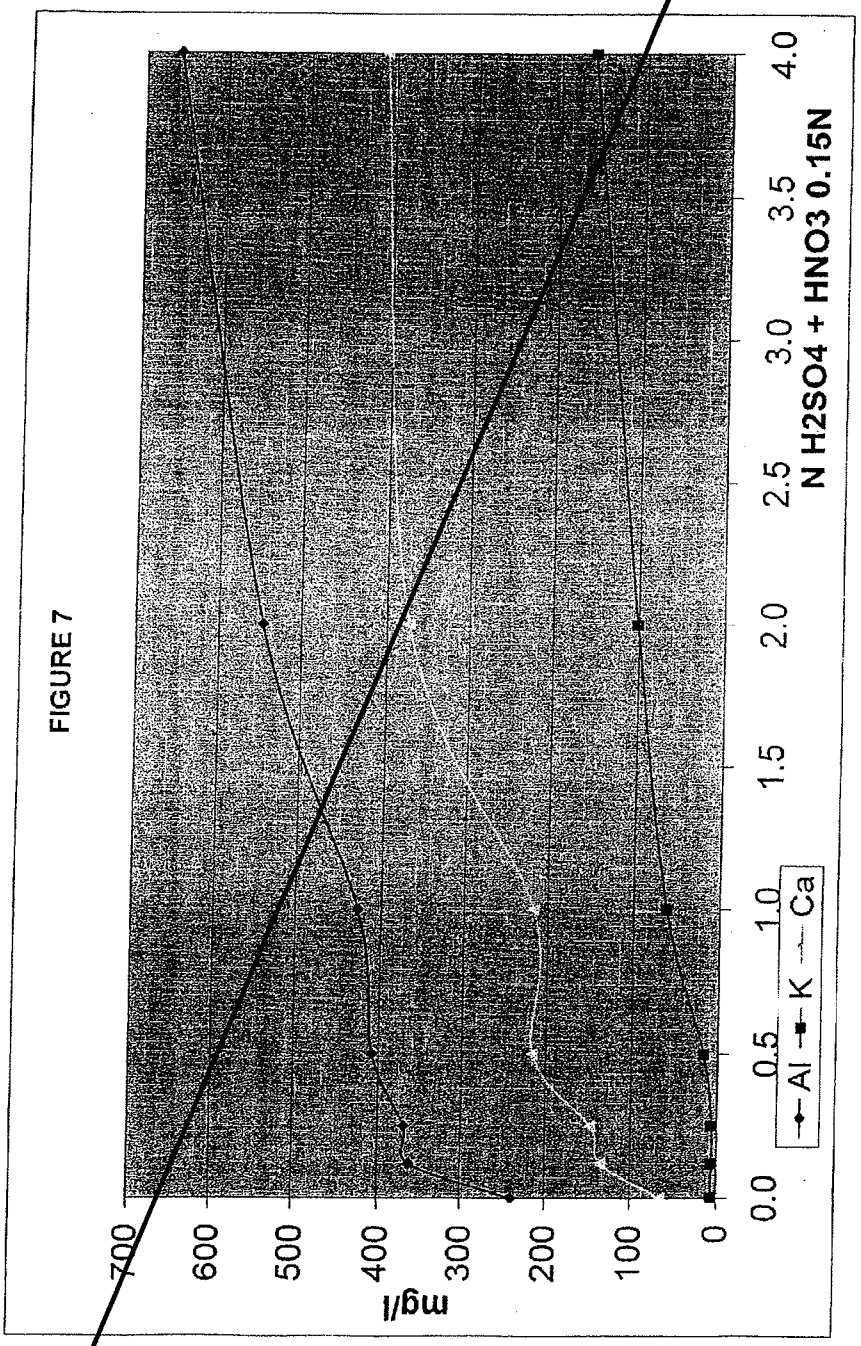

mg/l
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
N H2SO4 + HNO3 0.15N
Al
K
Ca

FIGURE 7

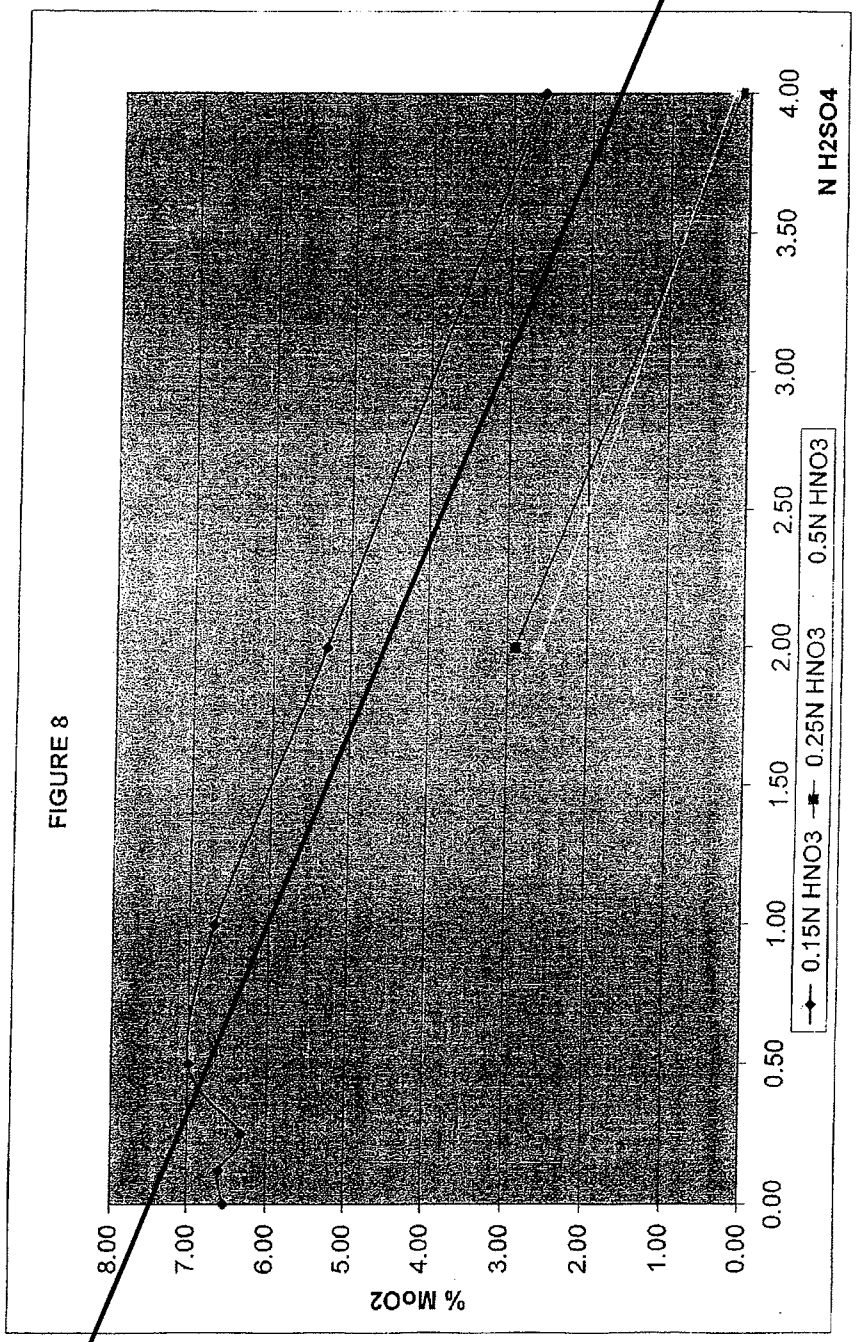

% MoO2
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2SO4
0.15N HNO3
0.25N HNO3
0.5N HNO3

FIGURE 8

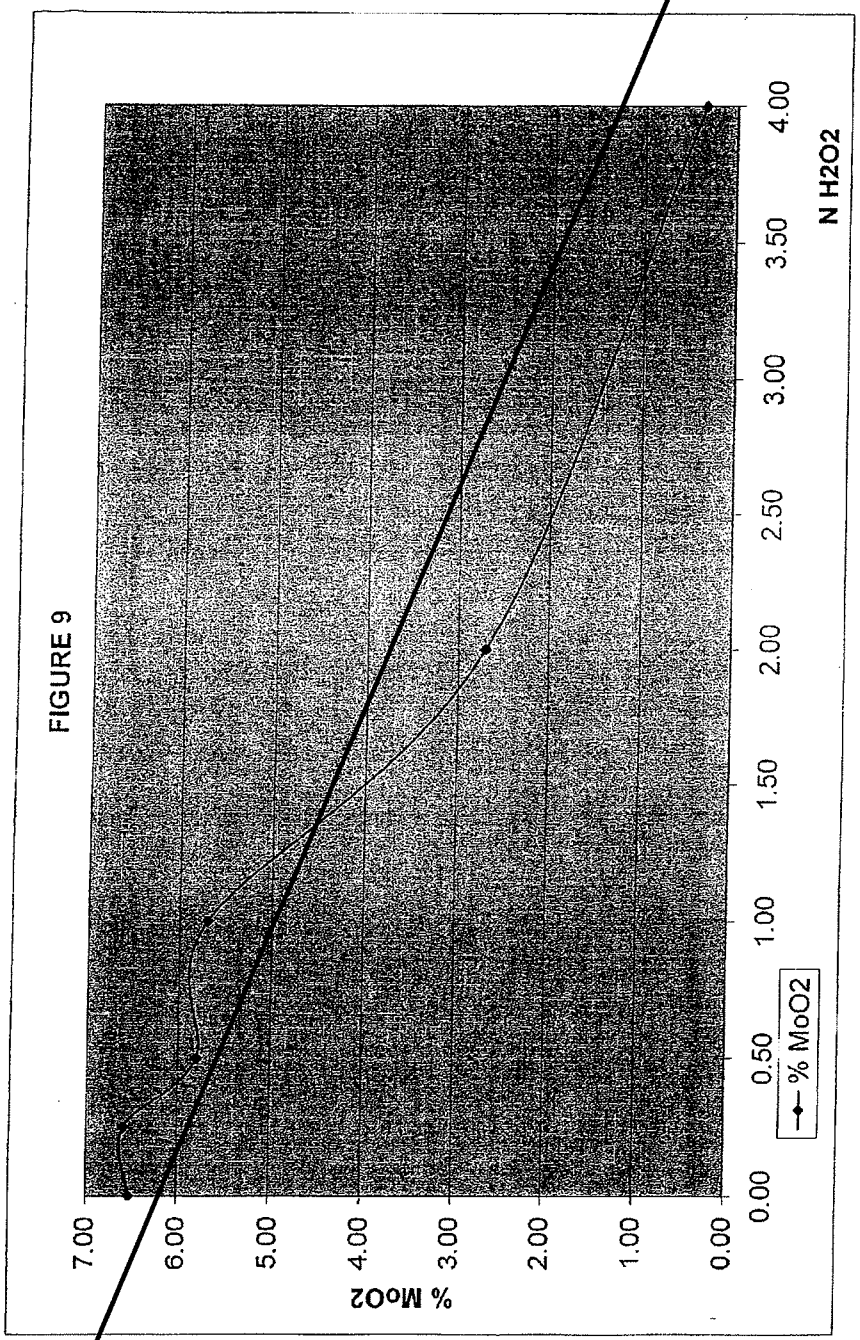


FIGURE 9
% MoO2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2O2
% MoO2

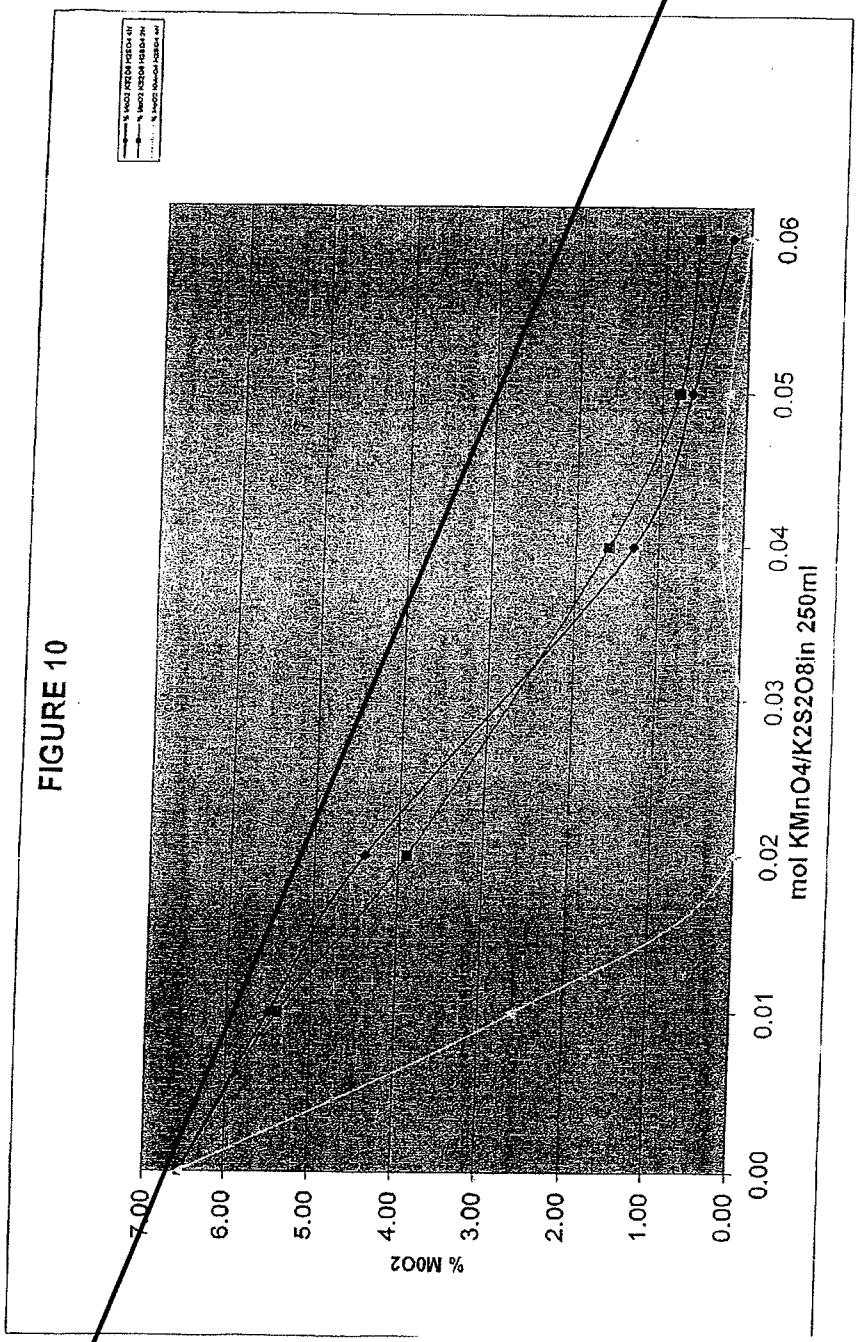

% MoO2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
0.01
0.02
0.03
0.04
0.05
0.06
mol KMnO4/K2S2O8in 250ml

FIGURE 10

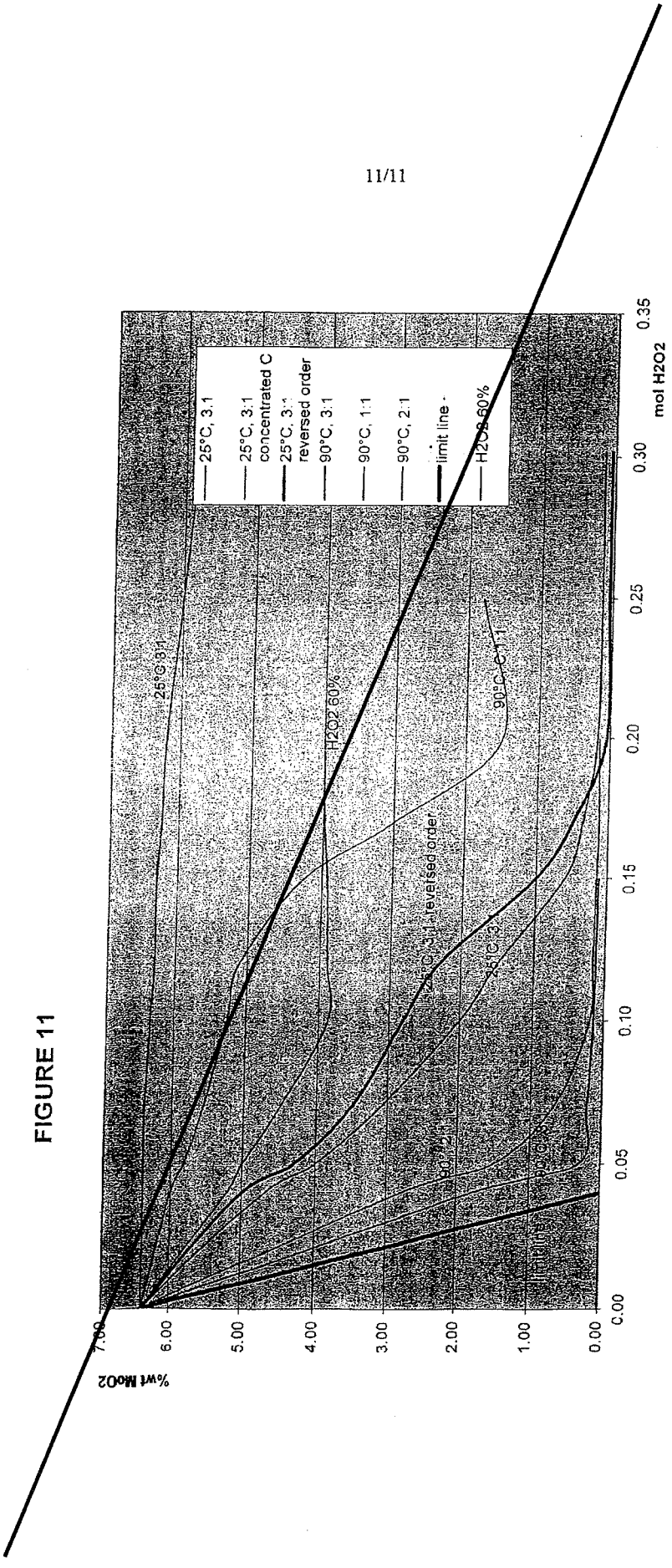

25°C, 3:1
25°C, 3:1 concentrated C
25°C, 3:1 reversed order
90°C, 3:1
90°C, 1:1
90°C, 2:1
limit line -
H2O2 60%
25°C, 3:1
H2O2 60%
90°C, 2:1
25°C, 3:1 reversed order
%wt MoO2
mol H2O2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00

FIGURE 11

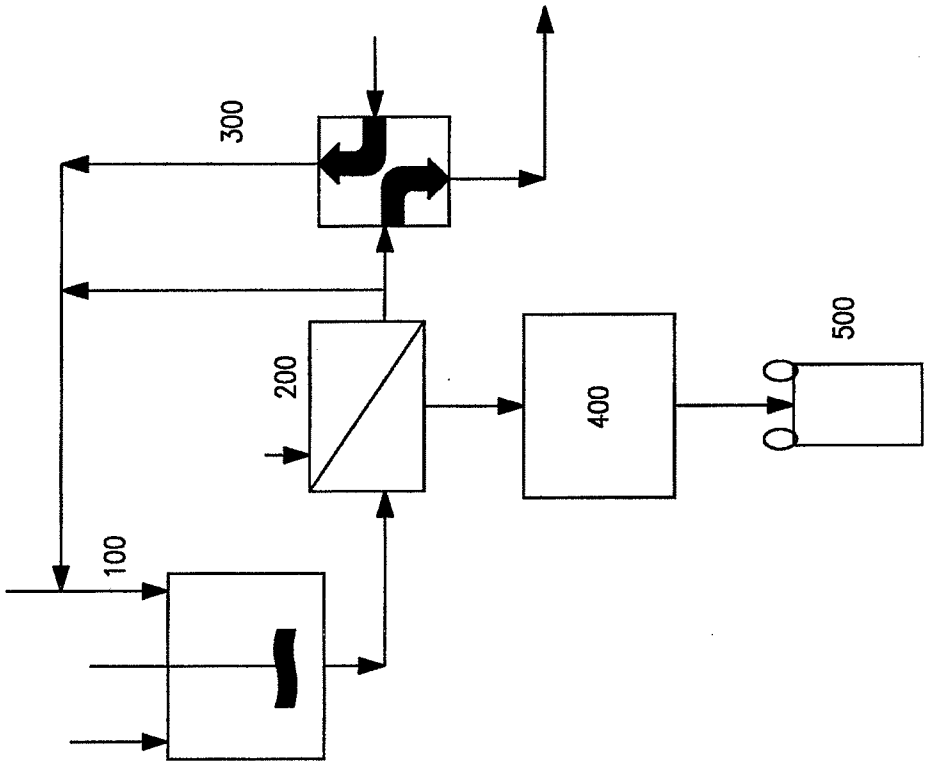


FIG. 1

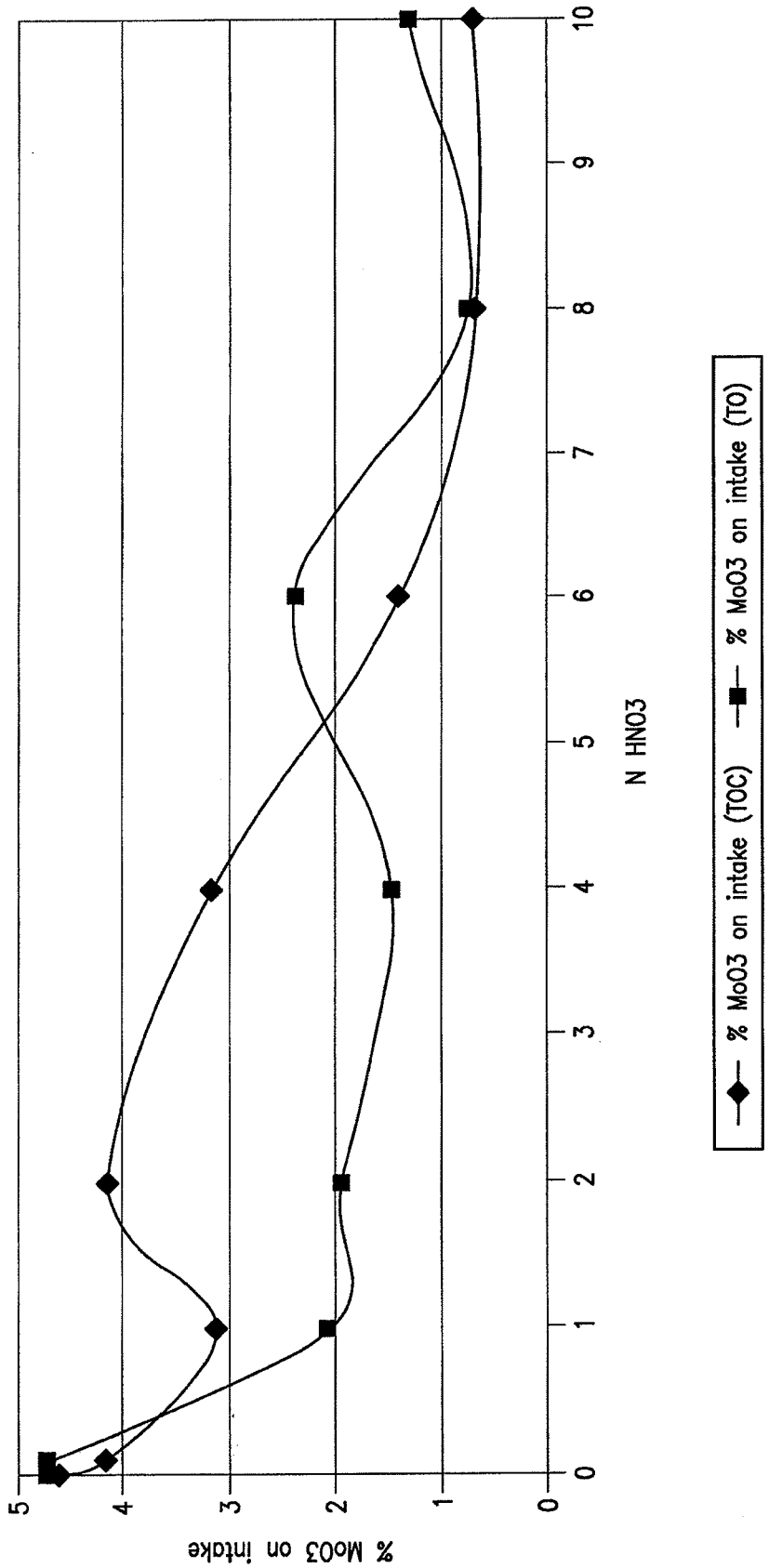

% MoO3 on intake
0
1
2
3
4
5
0
1
2
3
4
5
6
7
8
9
10
N HNO3
% MoO3 on intake (TOC)
% MoO3 on intake (TO)

FIG. 2

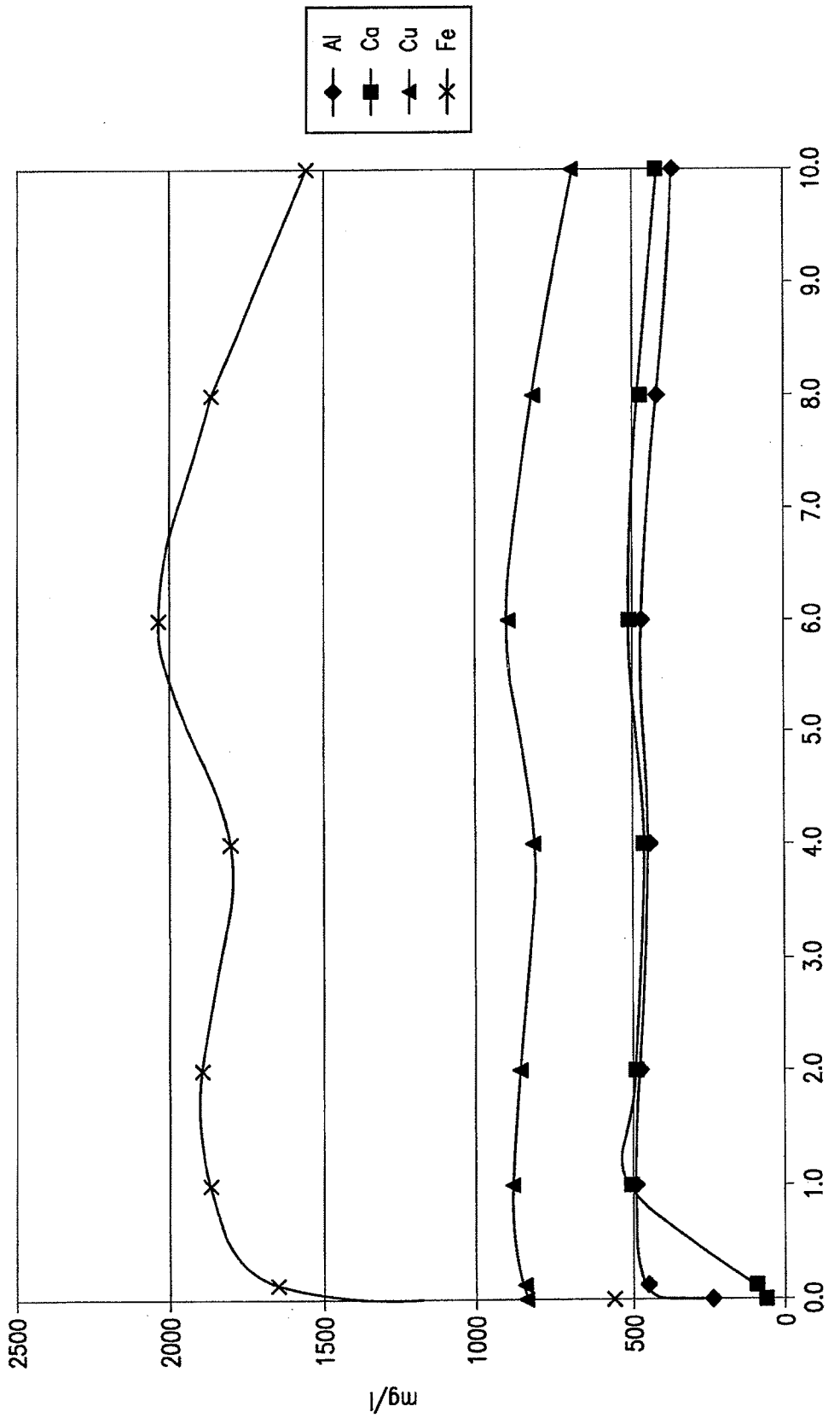

Al
Ca
Cu
Fe
mg/l
2500
2000
1500
1000
500
0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
normality HNO3

FIG. 3

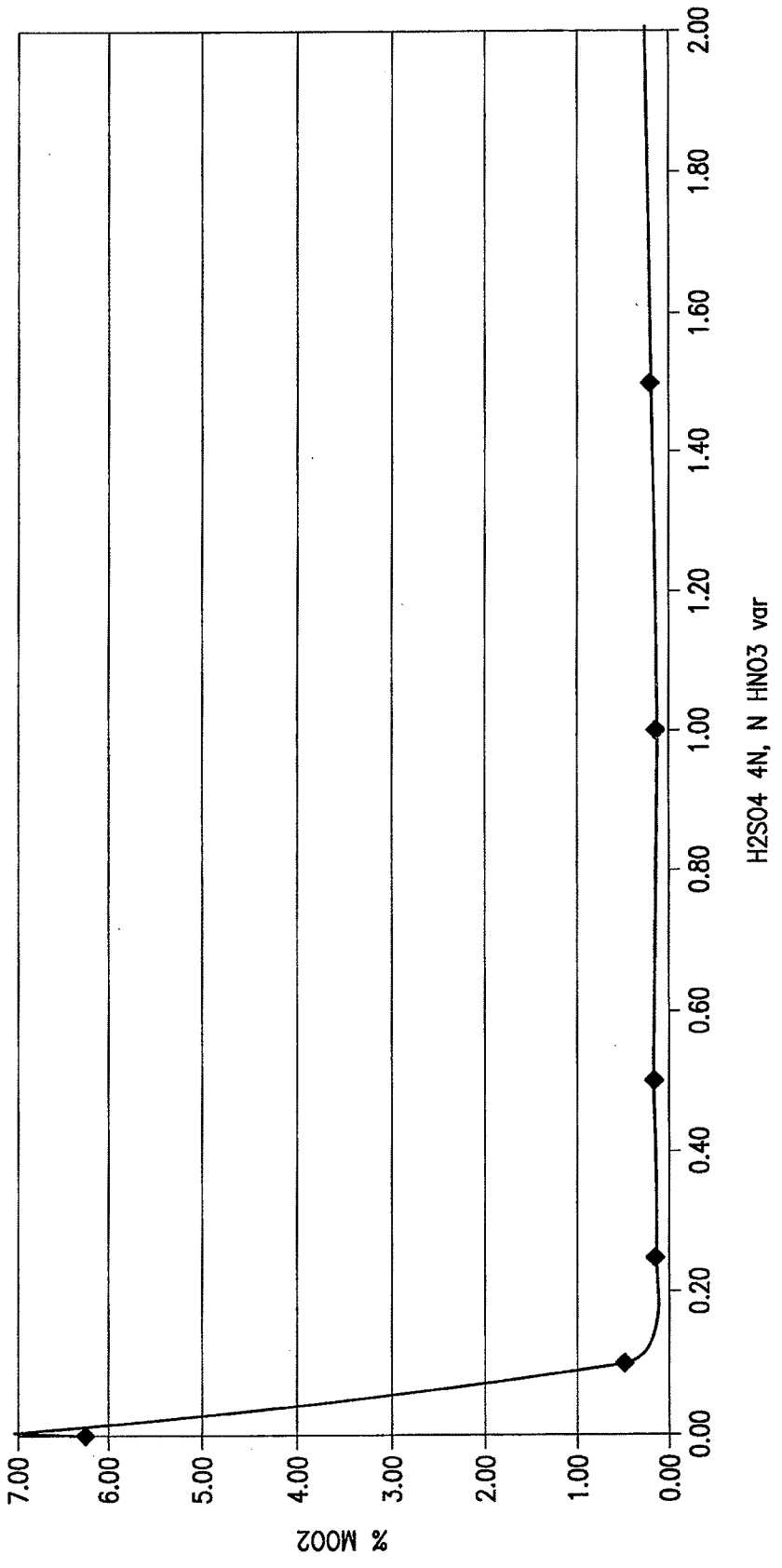

7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
% MOO2
0.00
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80
2.00
H2SO4 4N, N HNO3 var
%MoO2

FIG. 4

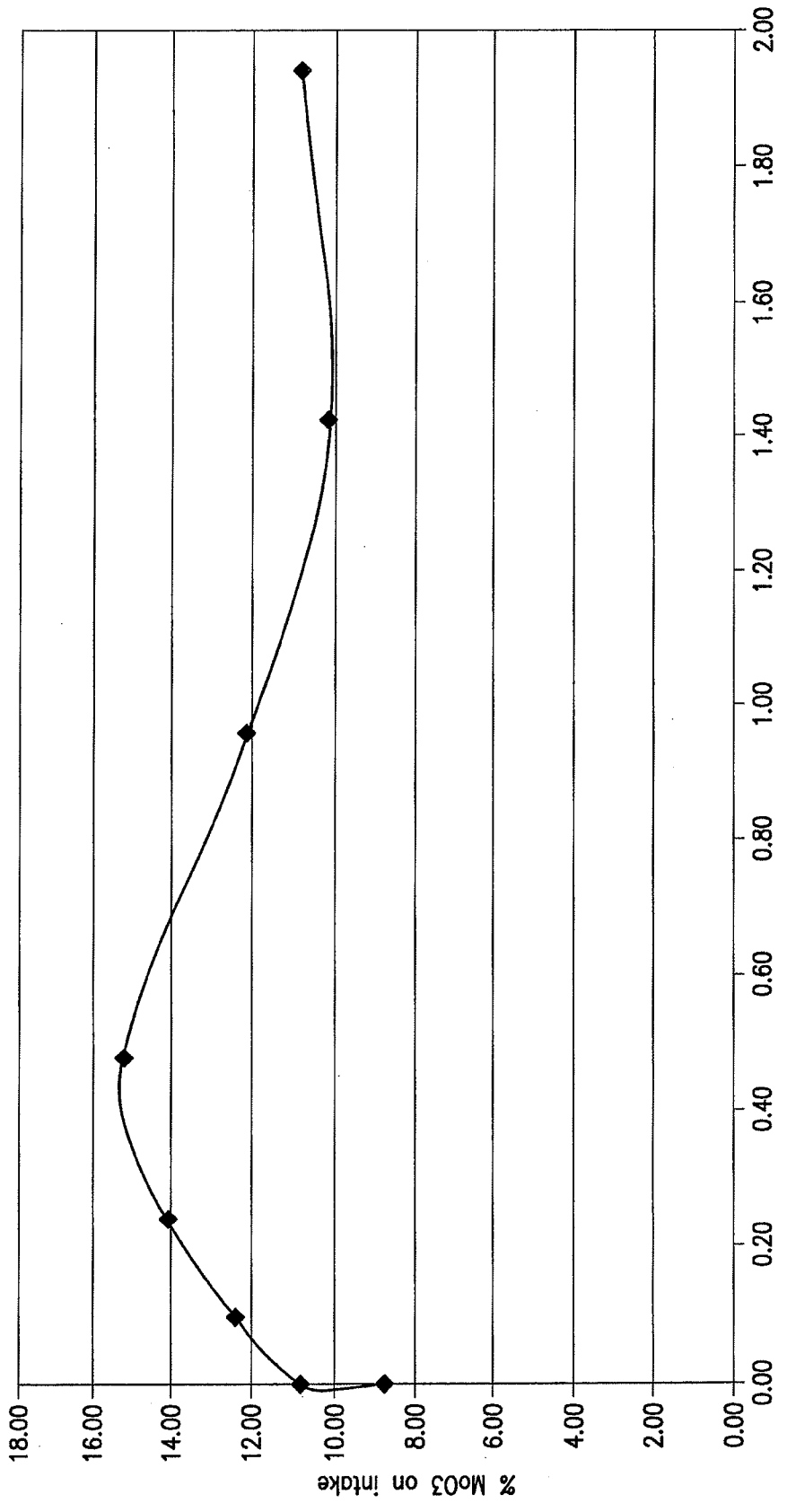

% MoO3 on intake
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.00
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80
2.00
N HNO3 var (+4N H2SO4)
%MoO3 on intake

FIG. 5

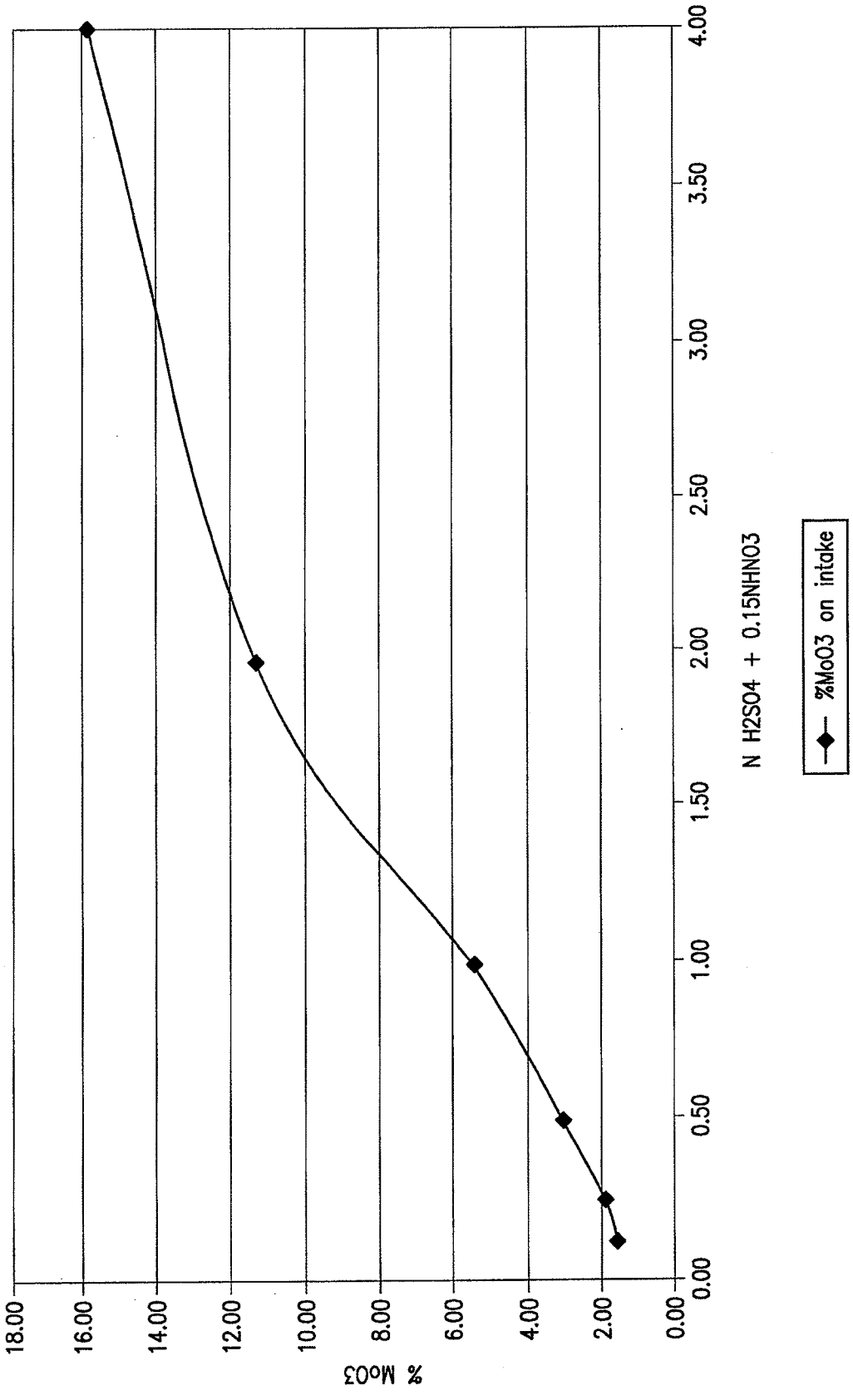

% MoO3
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2SO4 + 0.15NHNO3
%MoO3 on intake

FIG. 6

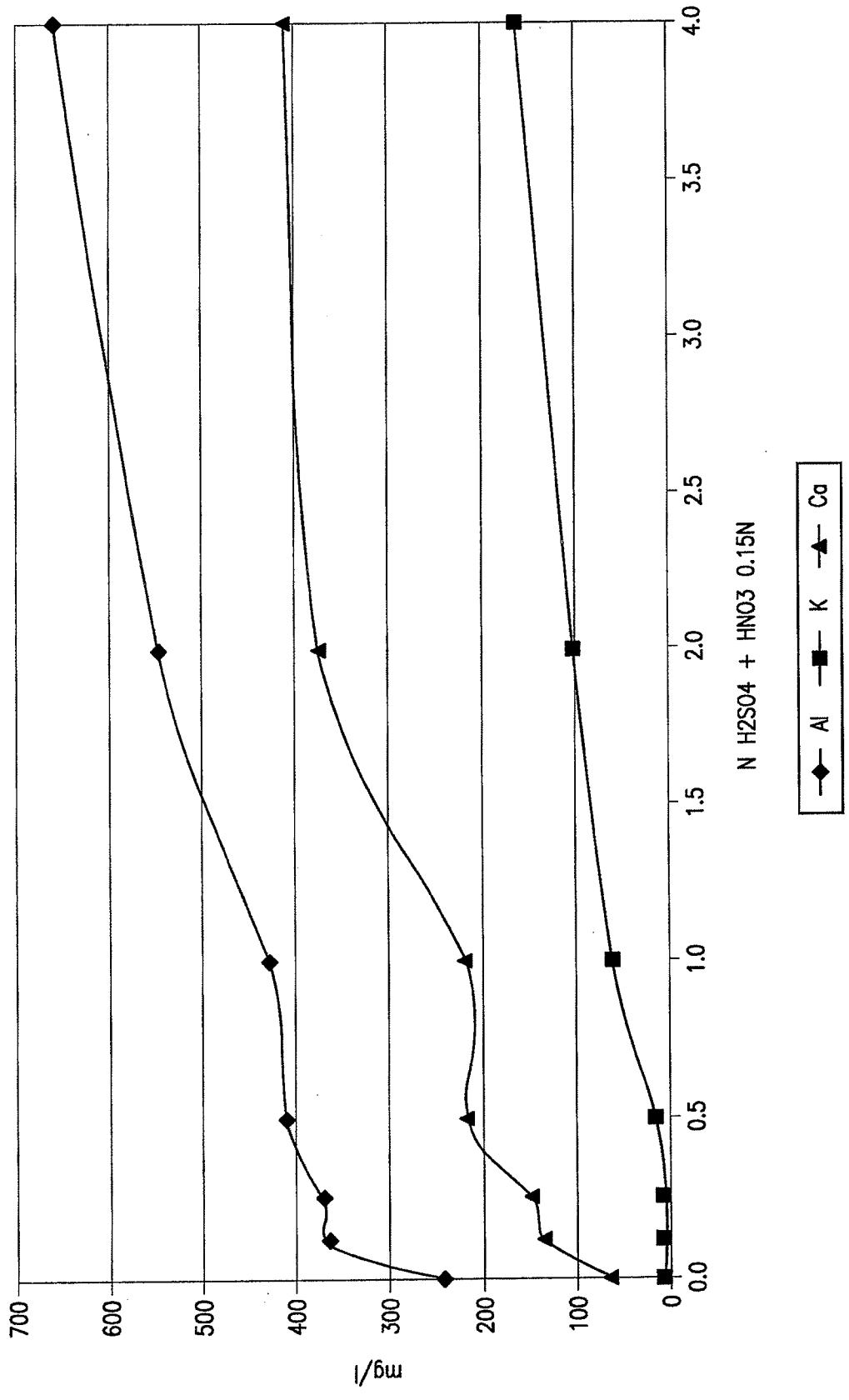

mg/l
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
N H2SO4 + HNO3 0.15N
Al
K
Ca

FIG. 7

8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0
% MoO2
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2SO4
0.15N HNO3
0.25N HNO3
0.5N HNO3

FIG. 8

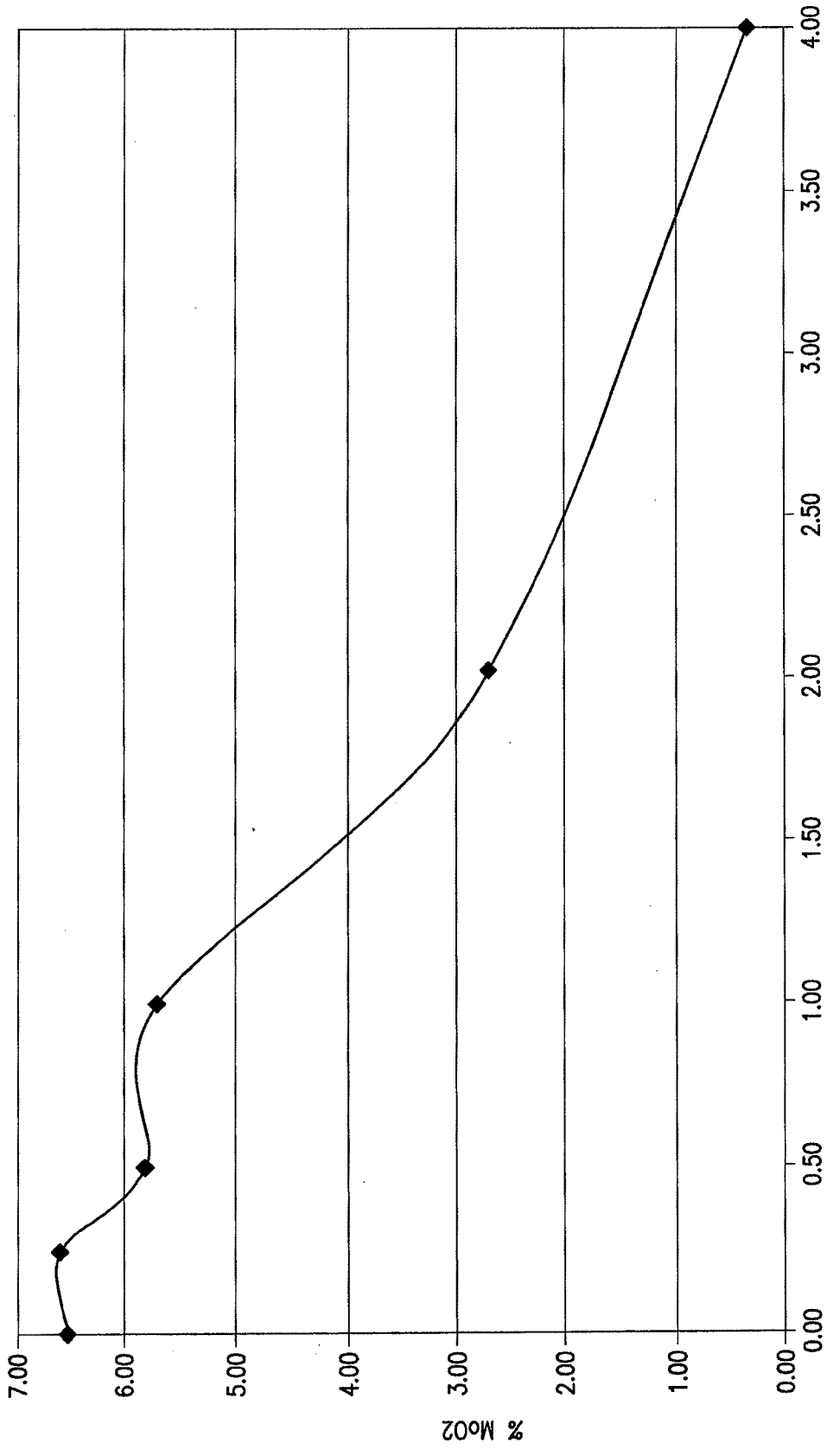

7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
% MoO2
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
N H2O2
% MoO2

FIG. 9

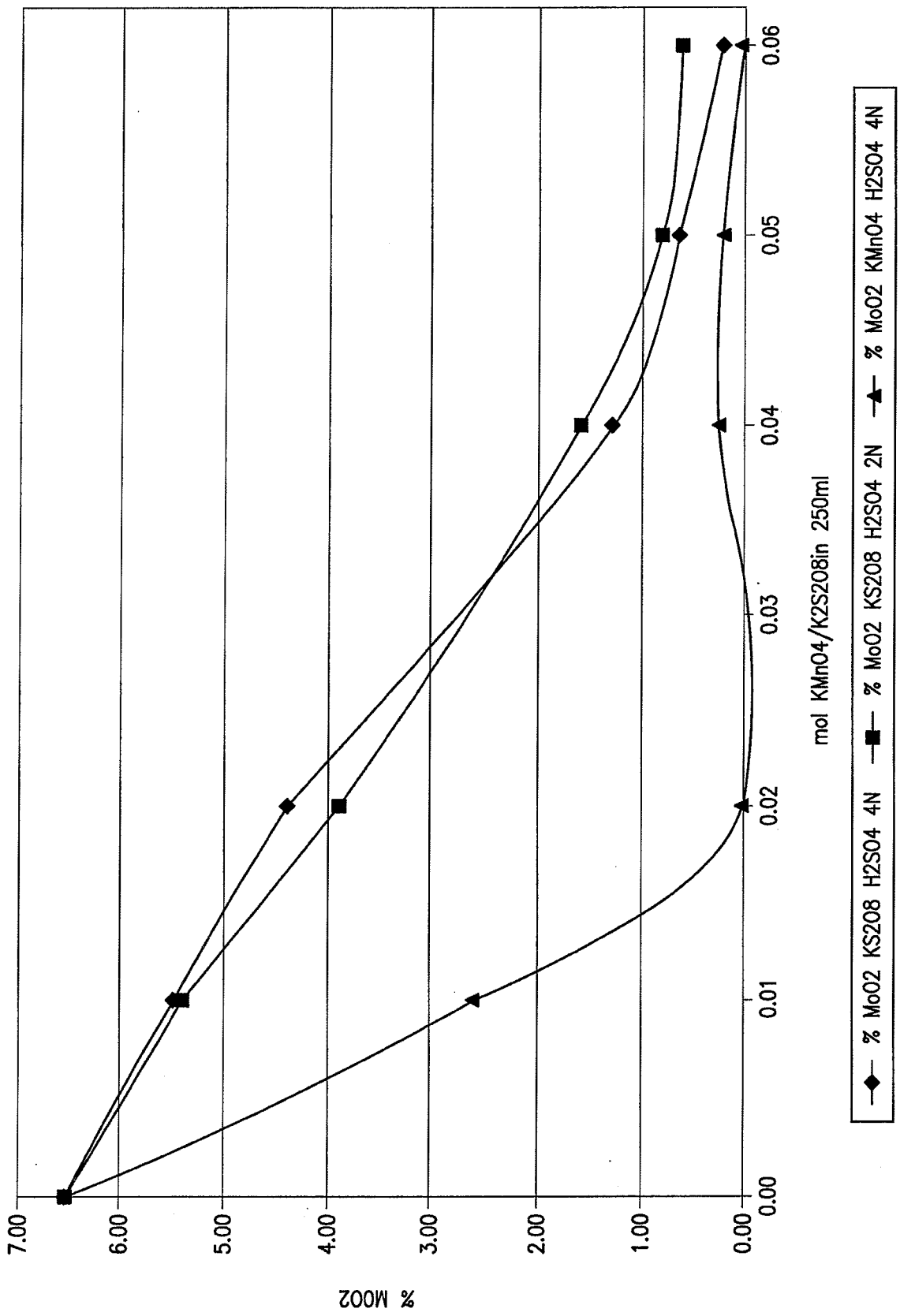

% MoO2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
0.01
0.02
0.03
0.04
0.05
0.06
mol KMnO4/K2S2O8in 250ml
% MoO2 KS2O8 H2SO4 4N
% MoO2 KS2O8 H2SO4 2N
% MoO2 KMnO4 H2SO4 4N

FIG. 10

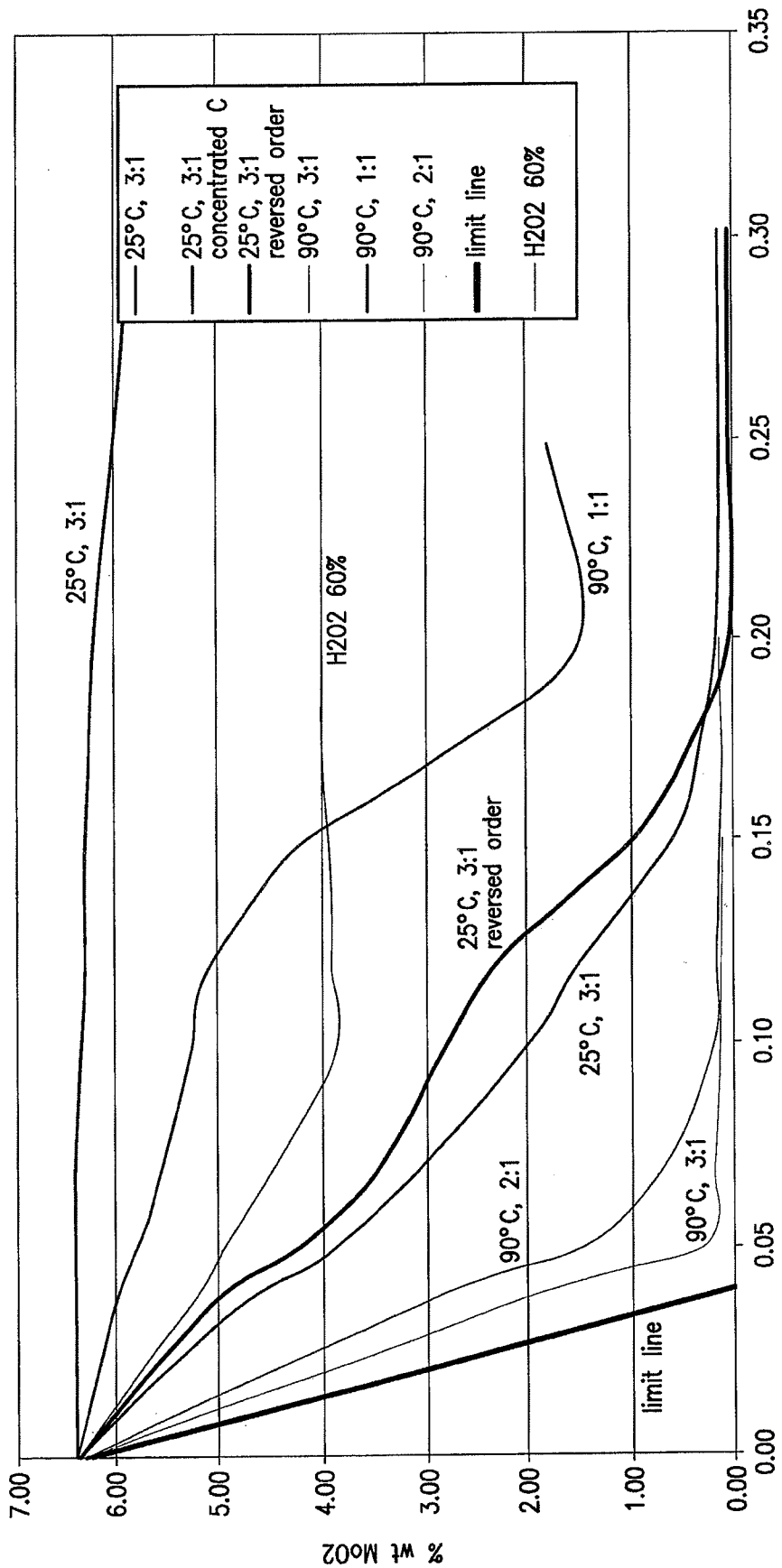

25°C, 3:1
25°C, 3:1 concentrated C
25°C, 3:1 reversed order
90°C, 3:1
90°C, 1:1
90°C, 2:1
limit line
H2O2 60%
25°C, 3:1
H2O2 60%
90°C, 1:1
25°C, 3:1 reversed order
25°C, 3:1
90°C, 2:1
90°C, 3:1
limit line
% wt MoO2
mol H2O2
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35

FIG. 11