Cumulative dissolution profiles of pure and modified alumina supports at a solids concentration of 2% (w/w)

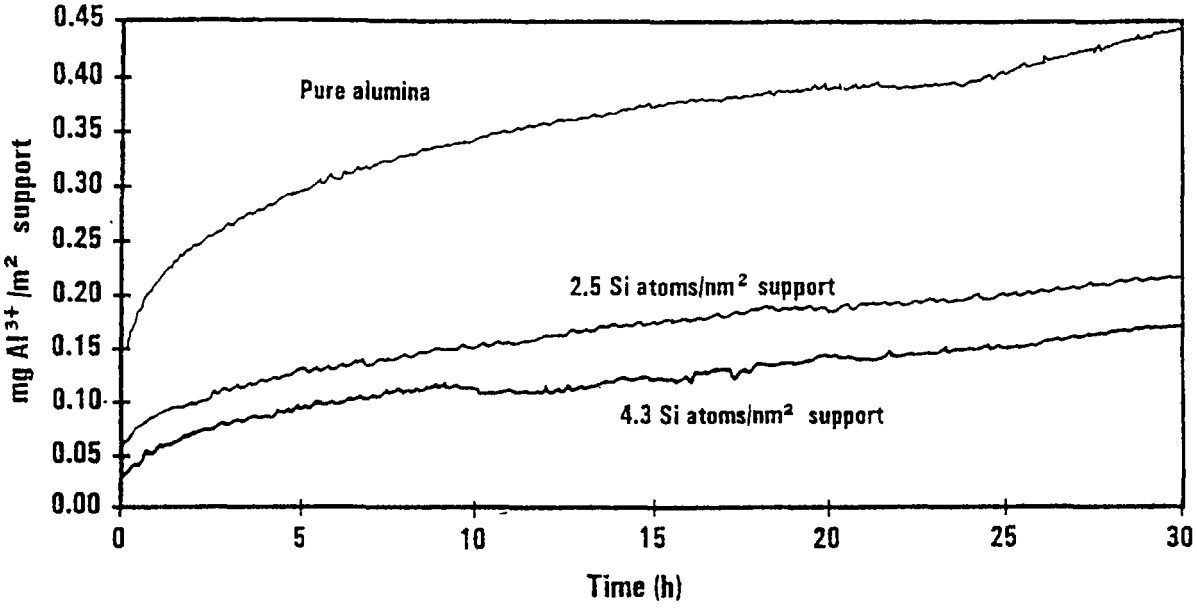



FIG 1

Cumulative dissolution profiles of pure γ $Al_2O_3$ in an aqueous slurry of constant pH = 2 at 30° C

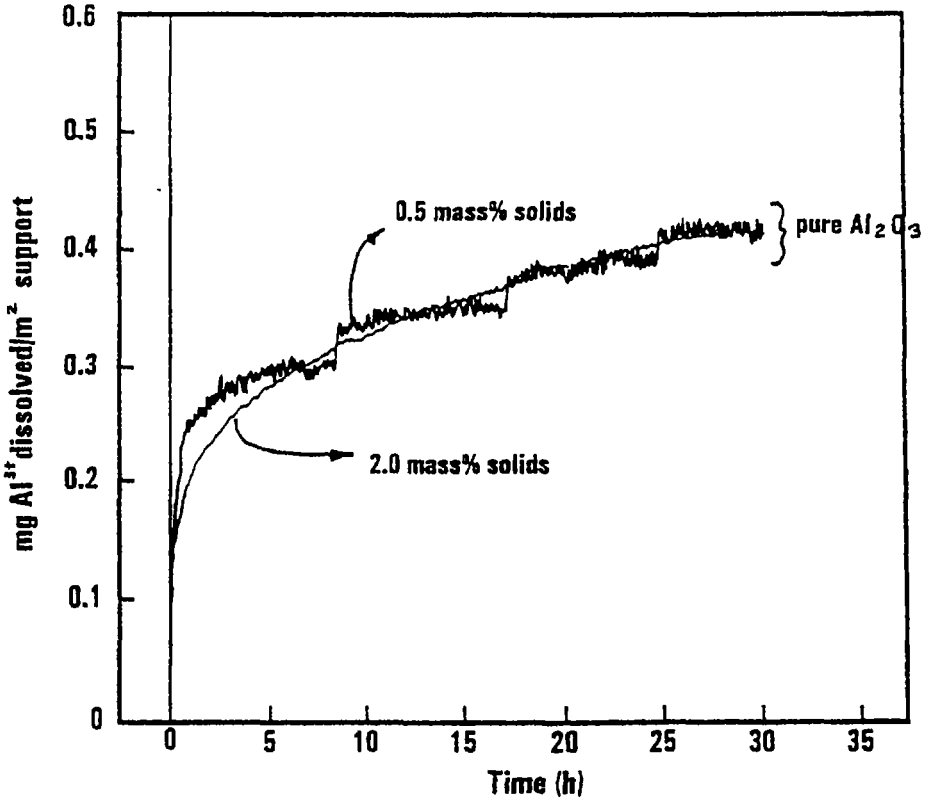



FIG 2

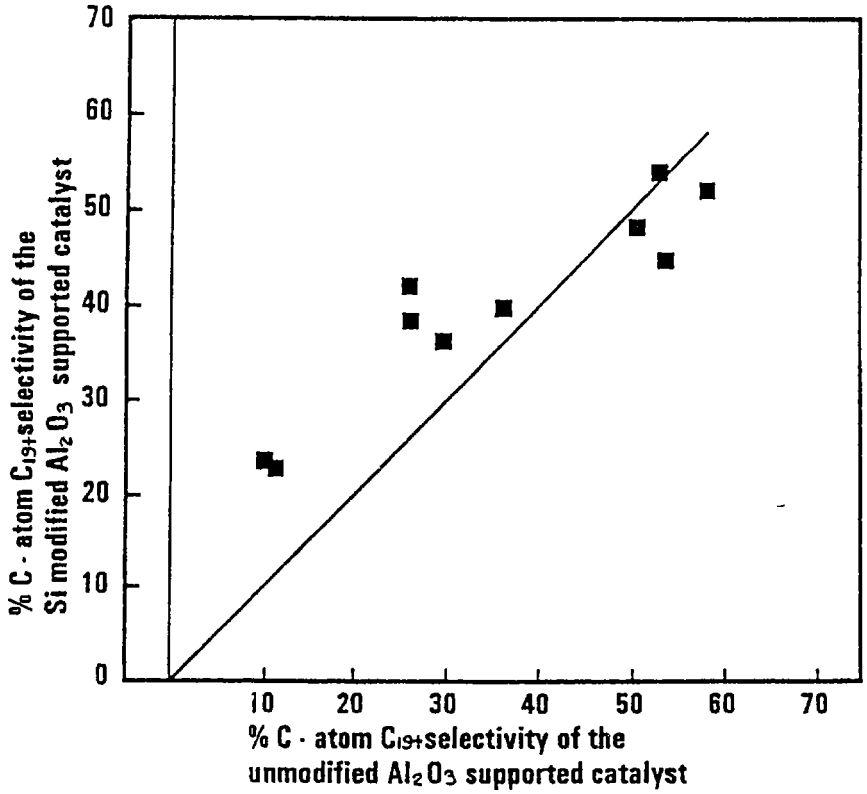

% C - atom C19+selectivity of the Si modified Al2O3 supported catalyst
% C - atom C19+selectivity of the unmodified Al2O3 supported catalyst
0
10
20
30
40
50
60
70

FIG 3

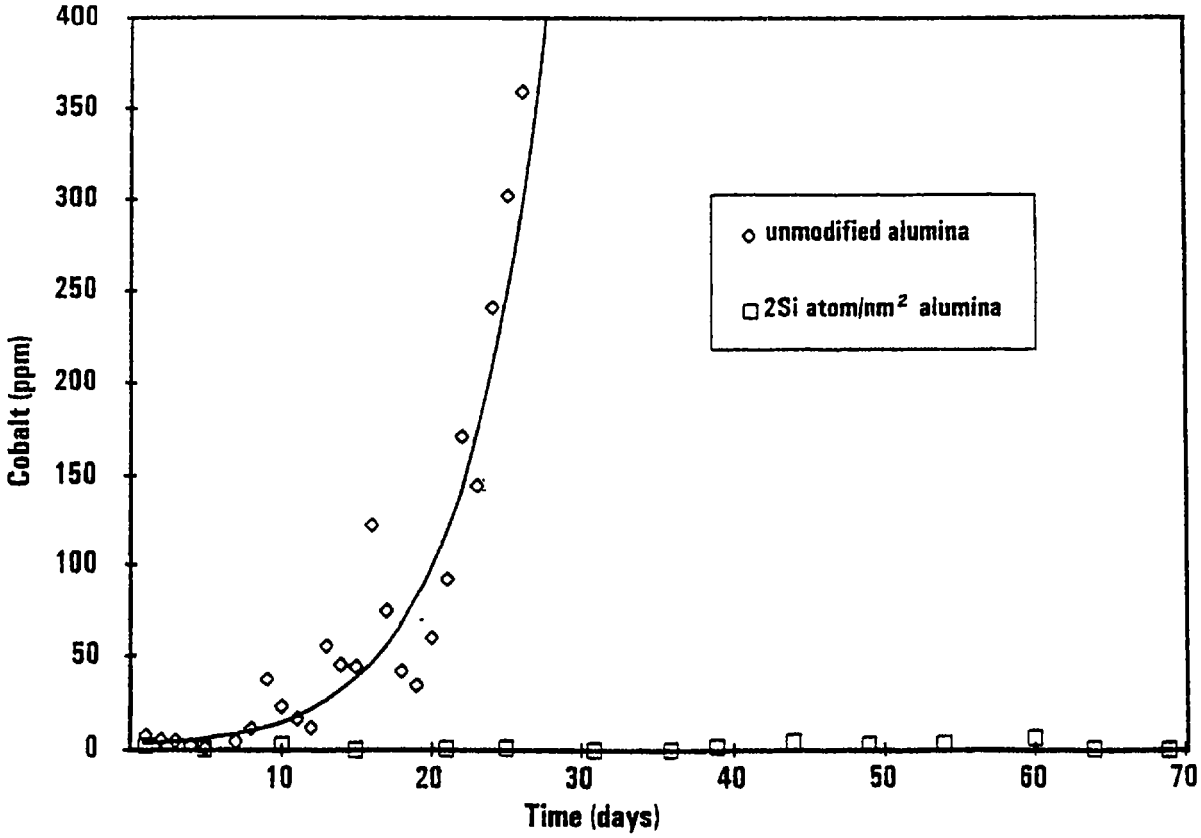

Cobalt (ppm)
Time (days)
◇ unmodified alumina
□ 2Si atom/nm² alumina
0
50
100
150
200
250
300
350
400
10
20
30
40
50
60
70

FIG 4

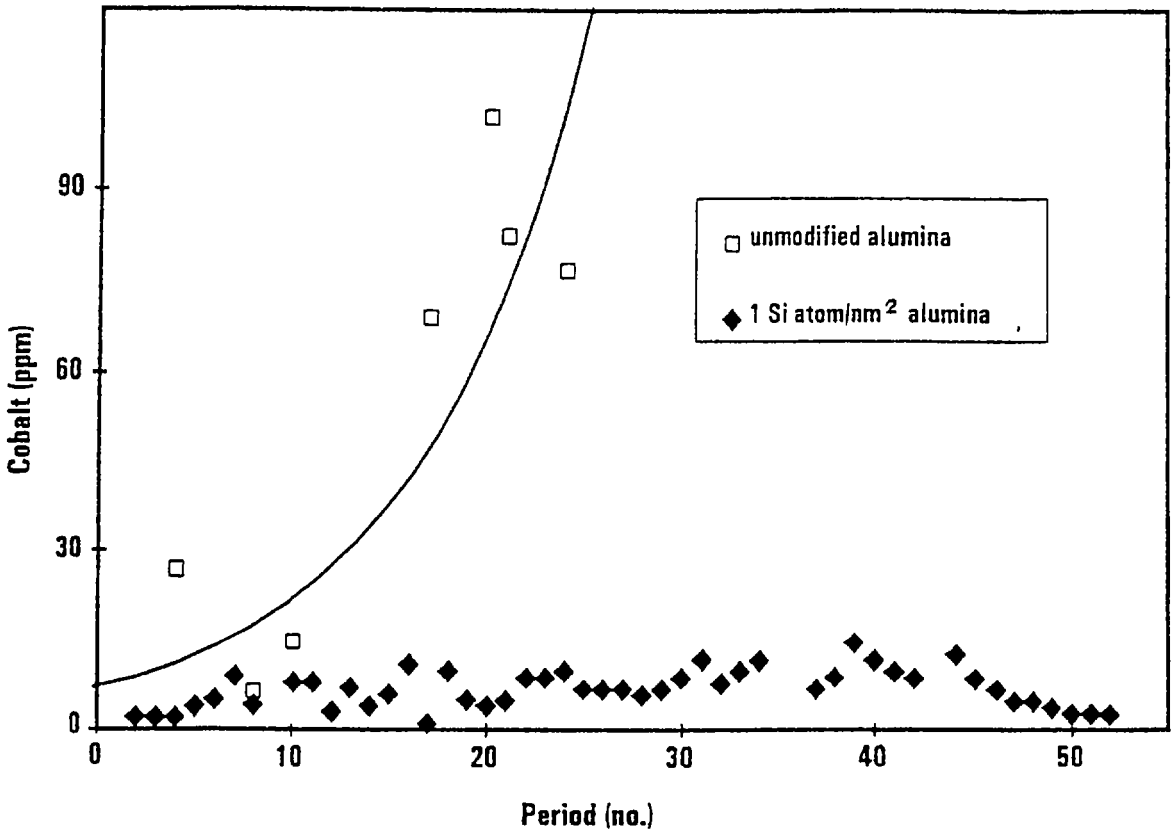



FIG 5

Cumulative dissolution profiles of pure and modified titania supports at a solids concentration of 2% (w/w)

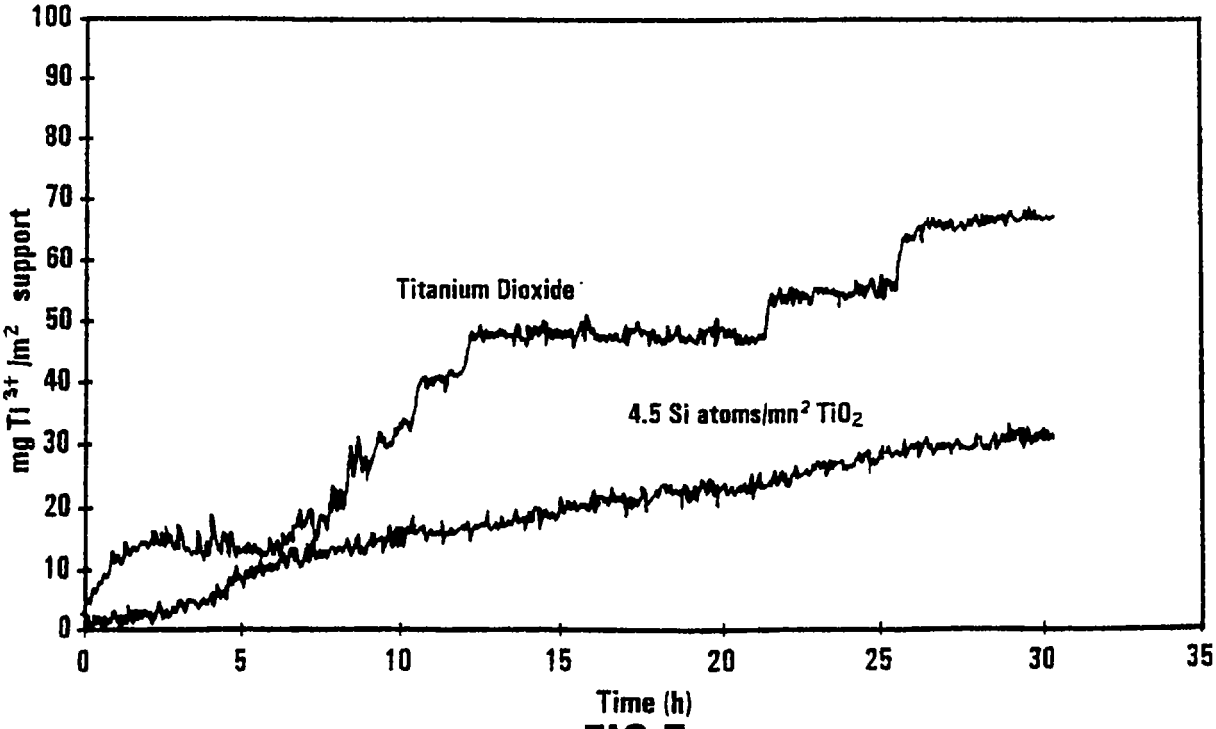



FIG 7

Cumulative dissolution profiles for unmodified and modified alumina supports at a solids concentration of 2% (w/w)

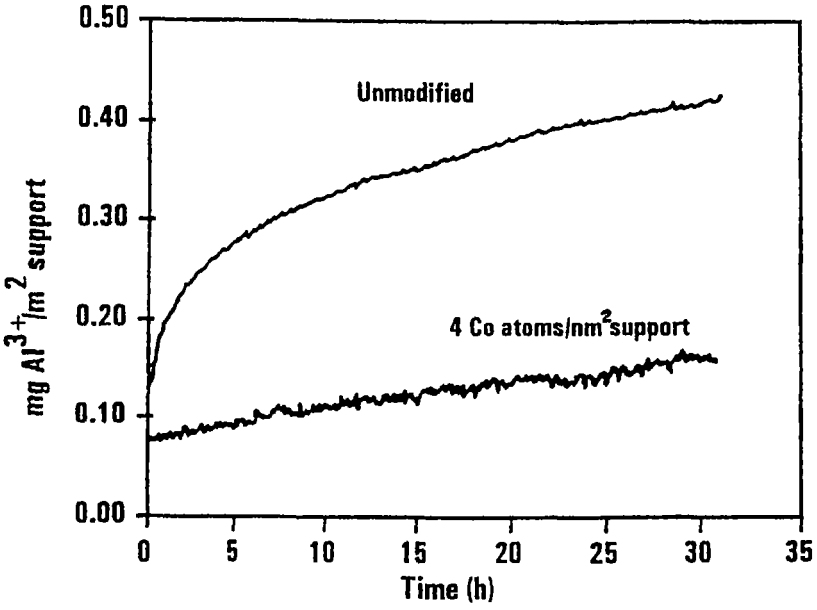



FIG 6

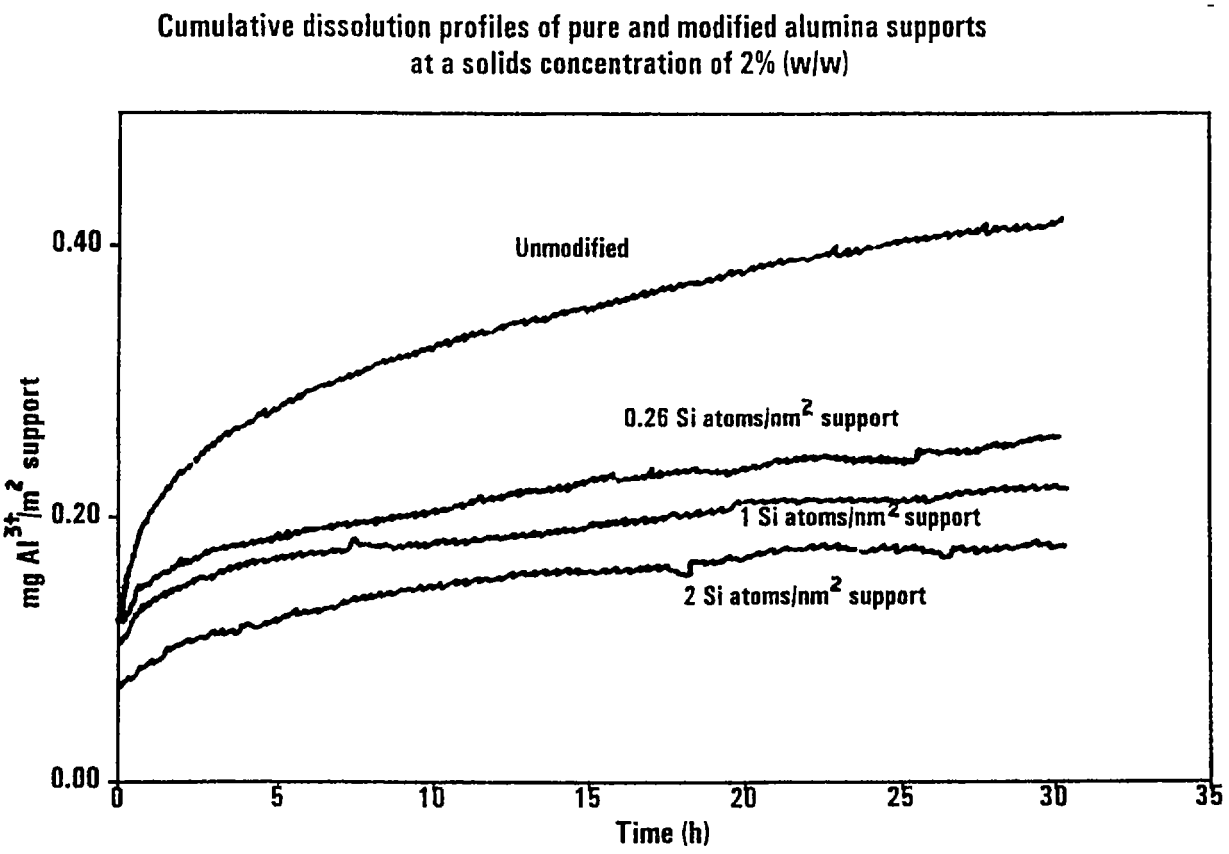

Cumulative dissolution profiles of pure and modified alumina supports
at a solids concentration of 2% (w/w)
Unmodified
0.26 Si atoms/nm2 support
1 Si atoms/nm2 support
2 Si atoms/nm2 support
mg Al3+/m2 support
Time (h)
0.00
0.20
0.40
0
5
10
15
20
25
30
35

FIG 8

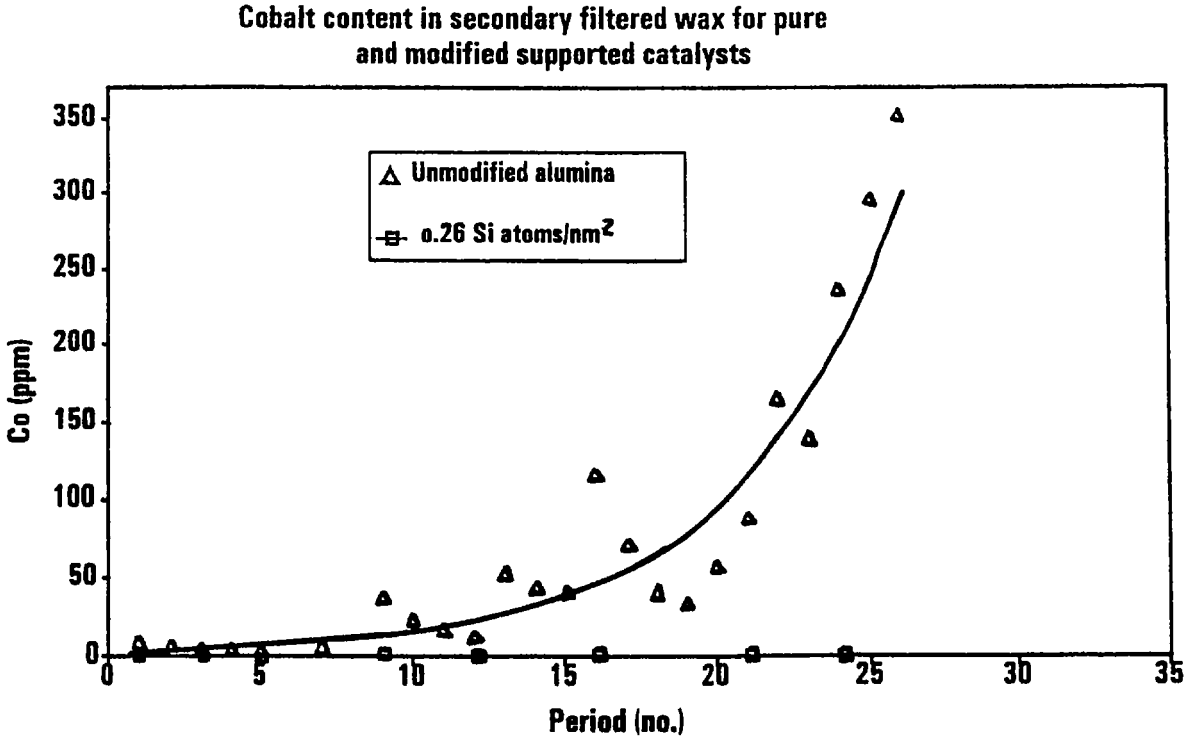

Cobalt content in secondary filtered wax for pure
and modified supported catalysts
Unmodified alumina
0.26 Si atoms/nm2
Co (ppm)
Period (no.)
0
50
100
150
200
250
300
350
0
5
10
15
20
25
30
35

FIG 9

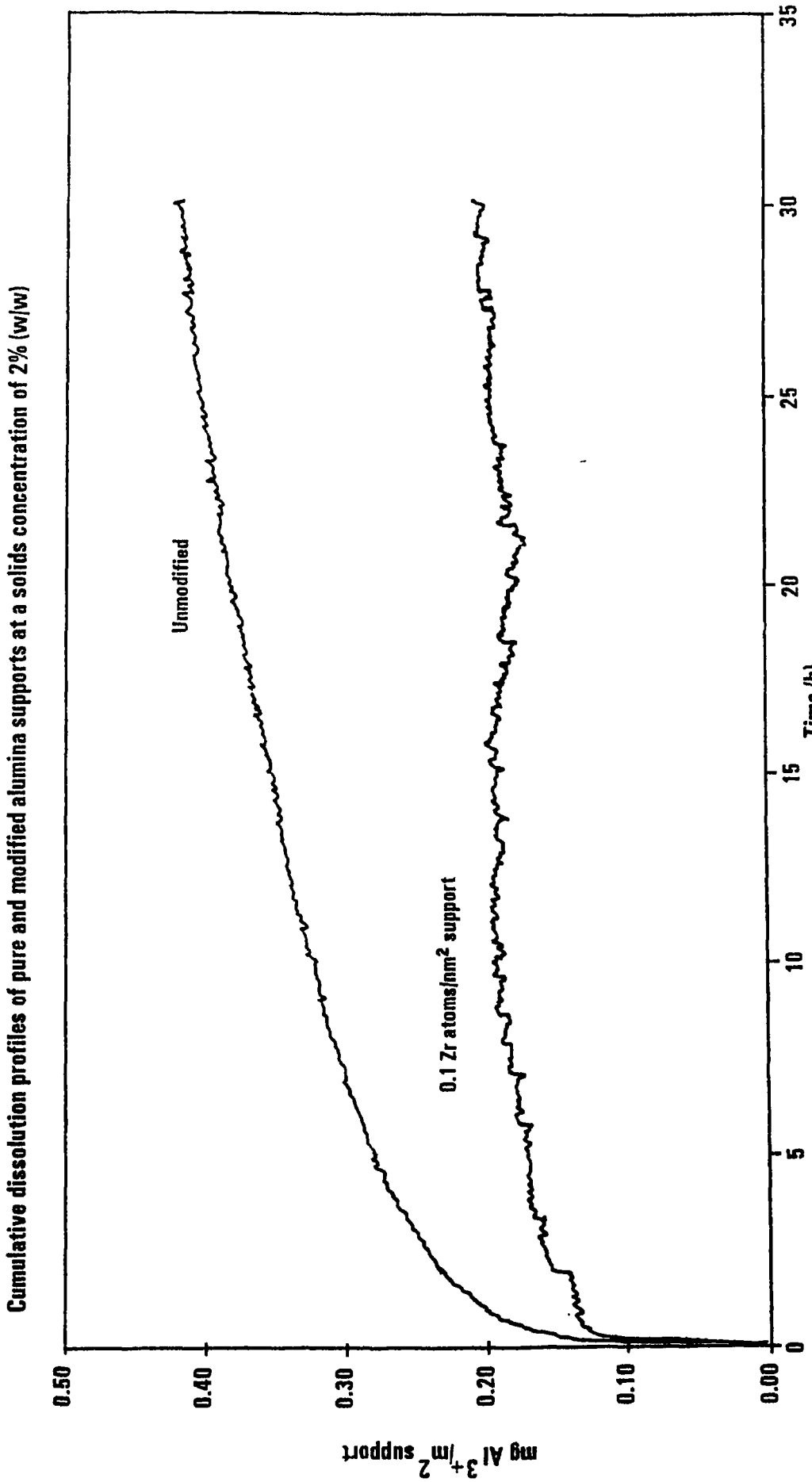

Cumulative dissolution profiles of pure and modified alumina supports at a solids concentration of 2% (w/w)
Unmodified
0.1 Zr atoms/nm² support
mg Al³⁺/m² support
0.50
0.40
0.30
0.20
0.10
0.00
0
5
10
15
20
25
30
35
Time (h)

FIG 10

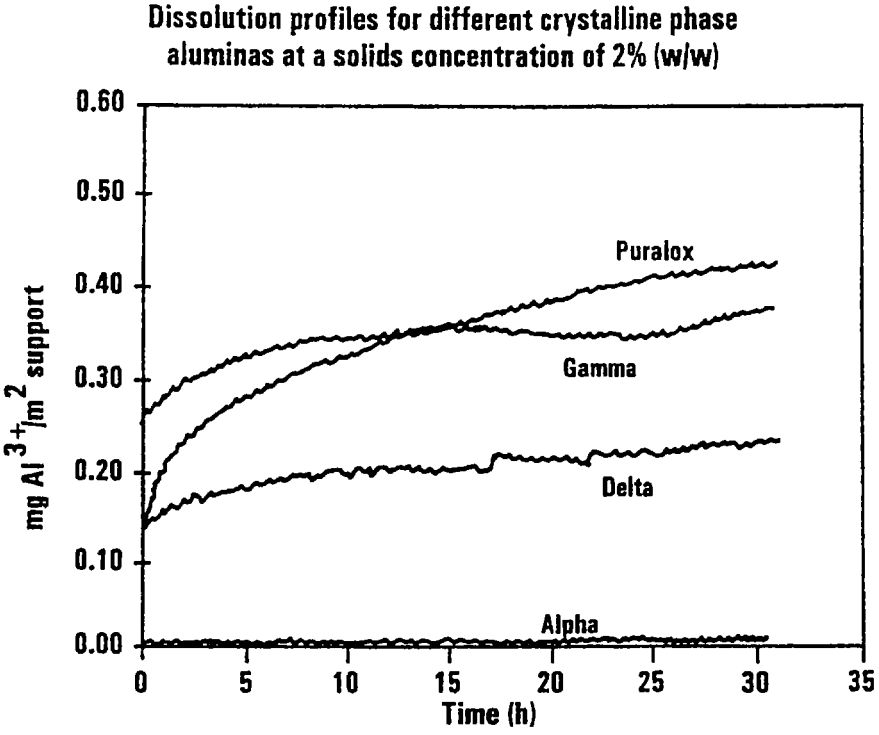

Dissolution profiles for different crystalline phase aluminas at a solids concentration of 2% (w/w)
mg Al3+/m2 support
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Puralox
Gamma
Delta
Alpha
0
5
10
15
20
25
30
35
Time (h)

FIG 11

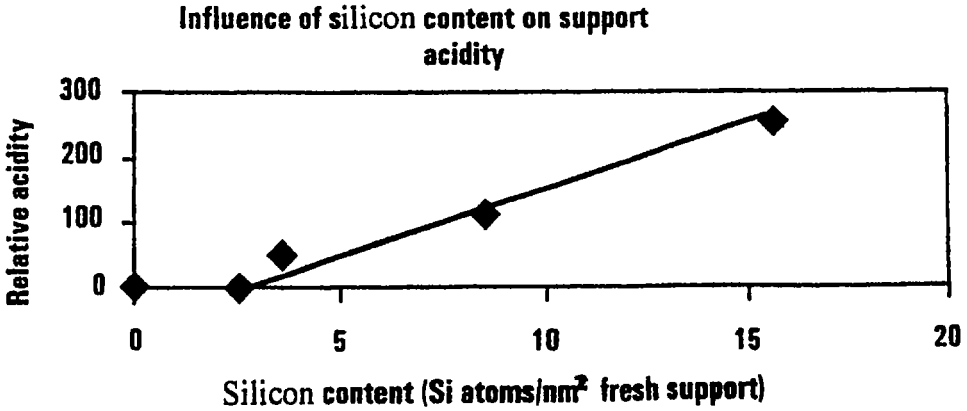

Influence of silicon content on support acidity
Relative acidity
300
200
100
0
0
5
10
15
20
Silicon content (Si atoms/nm2 fresh support)

FIG 12