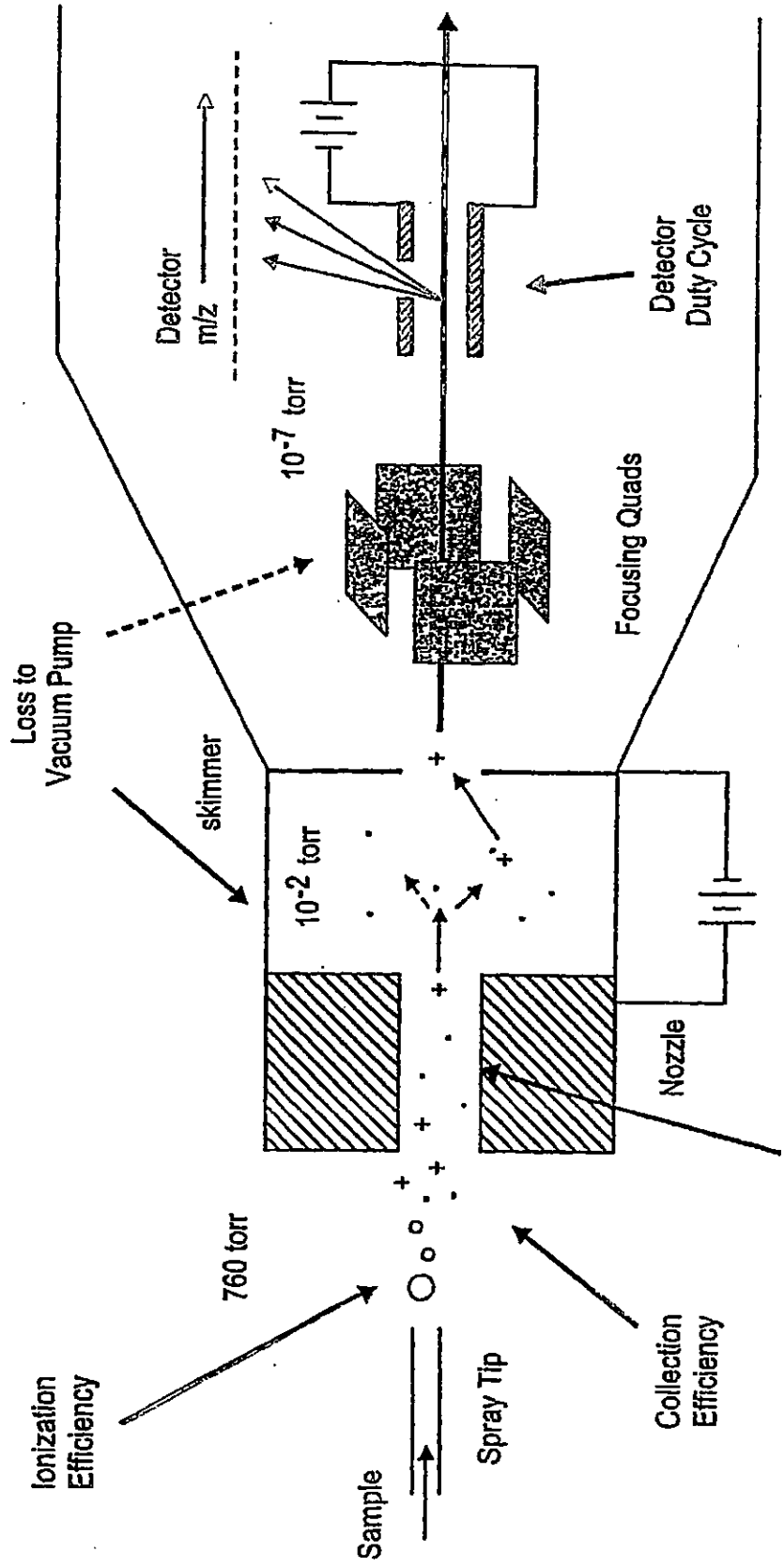

Detector
m/z
Detector
Duty Cycle
10^{-7} torr
Focusing Quads
Loss to
Vacuum Pump
skimmer
10^{-2} torr
Nozzle
Electrostatic Loss
to Internal Surface
760 torr
Ionization
Efficiency
Sample
Spray Tip
Collection
Efficiency

FIG. 1

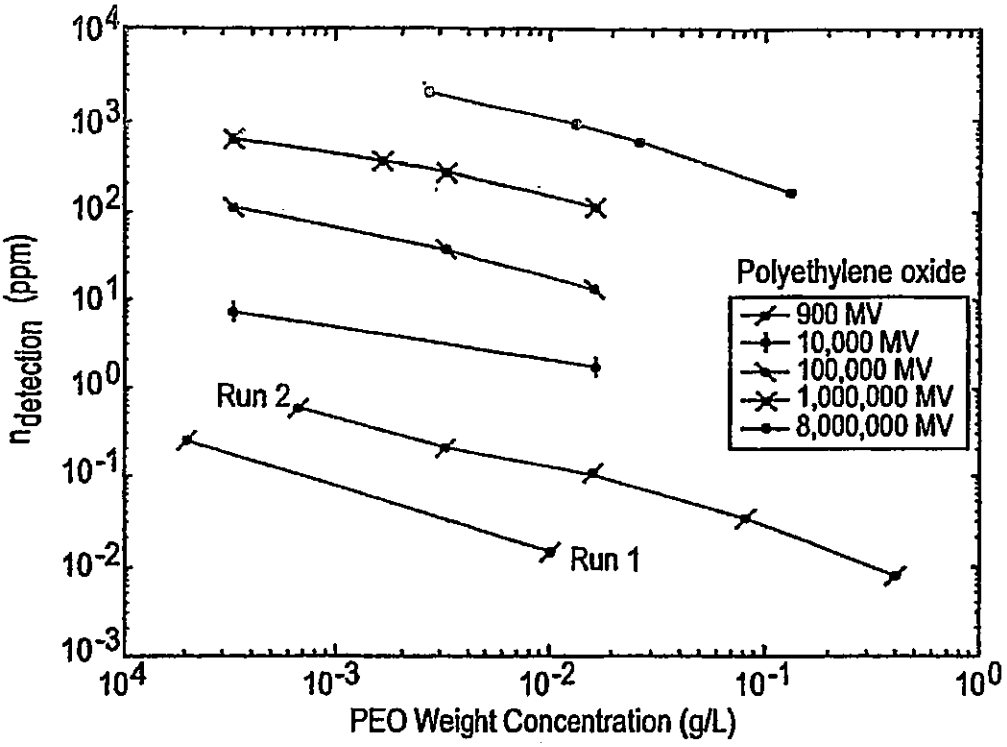

10^4
10^3
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
$n_{detection}$ (ppm)
Polyethylene oxide
900 MV
10,000 MV
100,000 MV
1,000,000 MV
8,000,000 MV
Run 2
Run 1
10^4
10^{-3}
10^{-2}
10^{-1}
10^0
PEO Weight Concentration (g/L)

FIG. 2

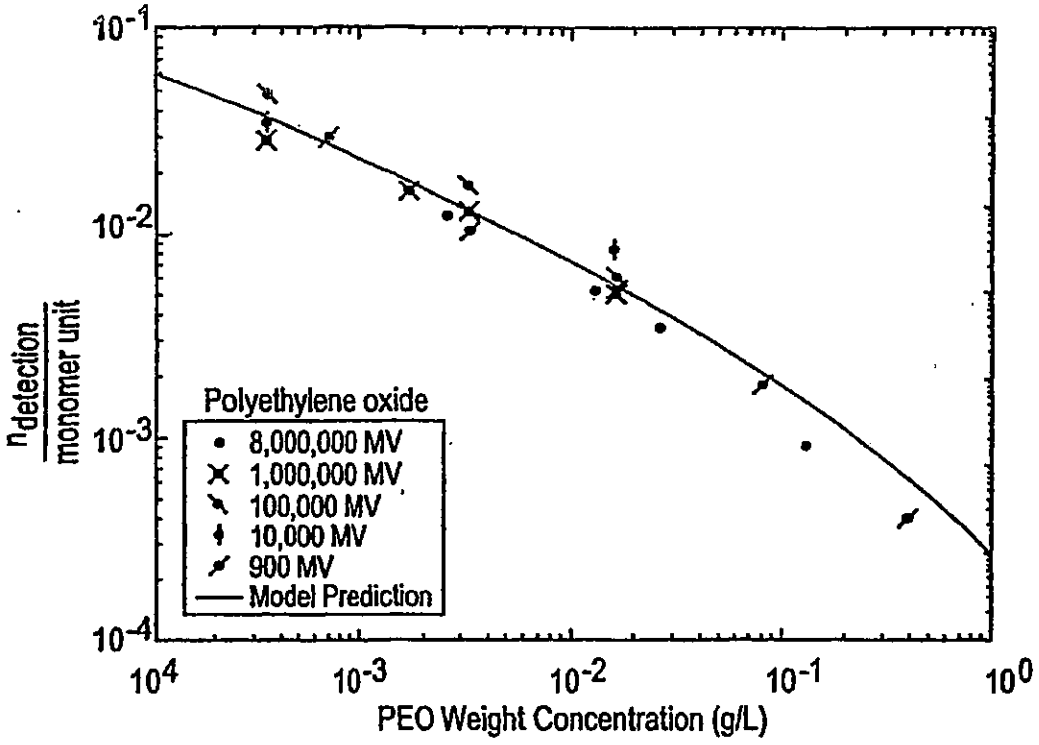

10^{-1}
10^{-2}
10^{-3}
10^{-4}
$\frac{n_{detection}}{monomer\ unit}$
Polyethylene oxide
8,000,000 MV
1,000,000 MV
100,000 MV
10,000 MV
900 MV
Model Prediction
10^{4}
10^{-3}
10^{-2}
10^{-1}
10^{0}
PEO Weight Concentration (g/L)

FIG. 3

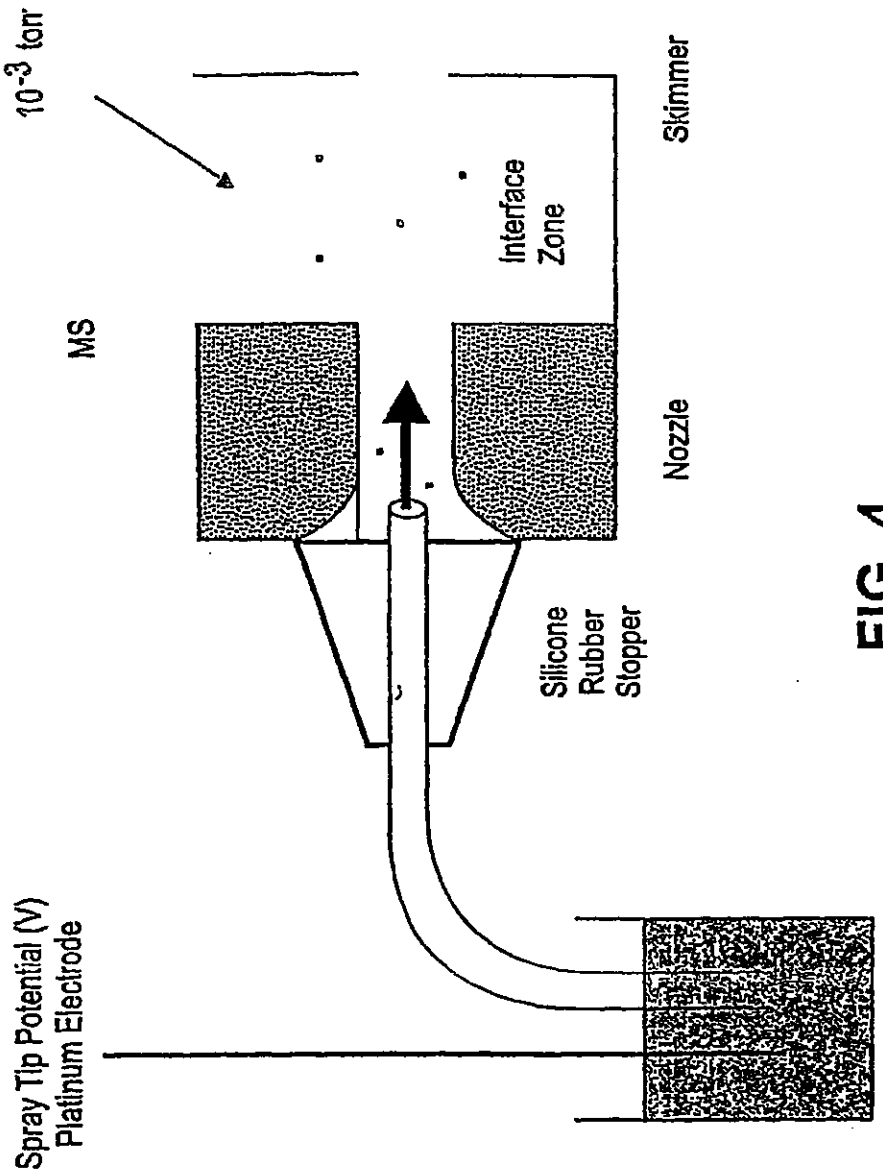

10^{-3} torr
MS
Skimmer
Interface Zone
Nozzle
Silicone Rubber Stopper
Spray Tip Potential (V)
Platinum Electrode

FIG. 4

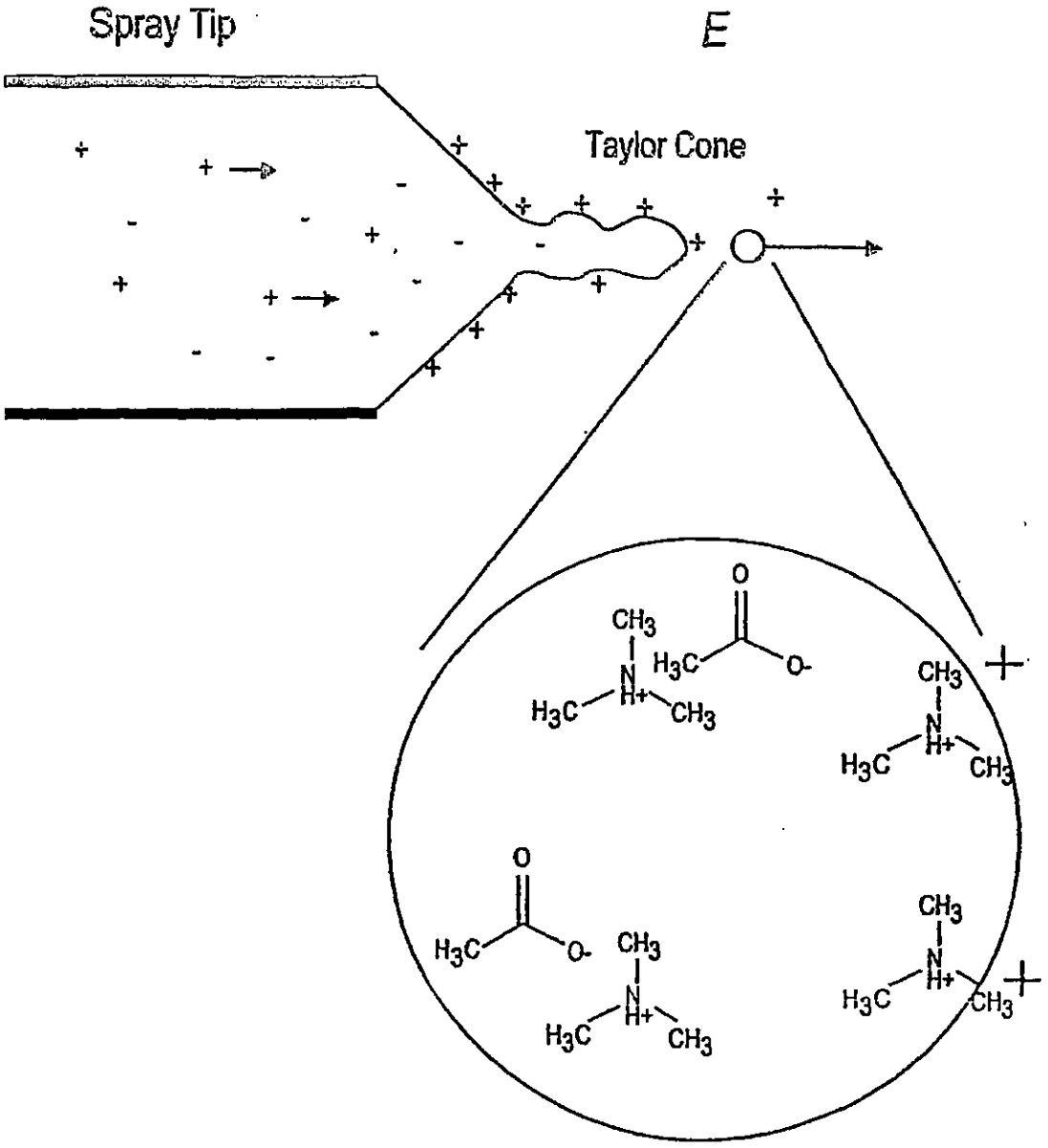


FIG. 5