$ZrCl_4(THF)_2$ (0.377 g, 1.00 mmol) in THF (20 mL) at -78 °C. The mixture was allowed to warm to room temperature and stirred for 15 h. The resulting mixture was concentrated *in vacuo* to afford a yellow solid. Diethyl ether (20 mL) was added to the solid, and the mixture was stirred for 5 min. The resulting mixture was filtered, and the solid residue was washed with diethyl ether (10 mL ×2). The combined organic filtrates were concentrated *in vacuo* to yield a yellow solid. The solid was recrystallized from a diethyl ether / *n*-hexane (2 / 15) solution at -40 °C to give complex **15** (0.075 g, 0.07 mmol) as a yellow powder in 7 % yield. ^{1}H-NMR ($CDCl_3$): δ. 1.14 (d, J= 5Hz, 12H, isopropyl-Me), 1.71, (s, 12H, cumyl-Me), 1.73 (s, 12H, cumyl-Me), 3.70-3.80 (m, 2H, CH), 6.90-7.41 (m, 32H, aromatic-H), 8.42 (s, 2H, CH=N). Anal. Found; C, 73.57; H, 6.41; N, 2.34 %. Calcd for $ZrC_{68}H_{72}N_2O_2Cl_2$; C, 73.48; H, 6.53; N, 2.52 %. FD-MS, 1110 (M^+).

4. ^{13}C-NMR spectrum of polyethylene produced by complex 1 / MAO

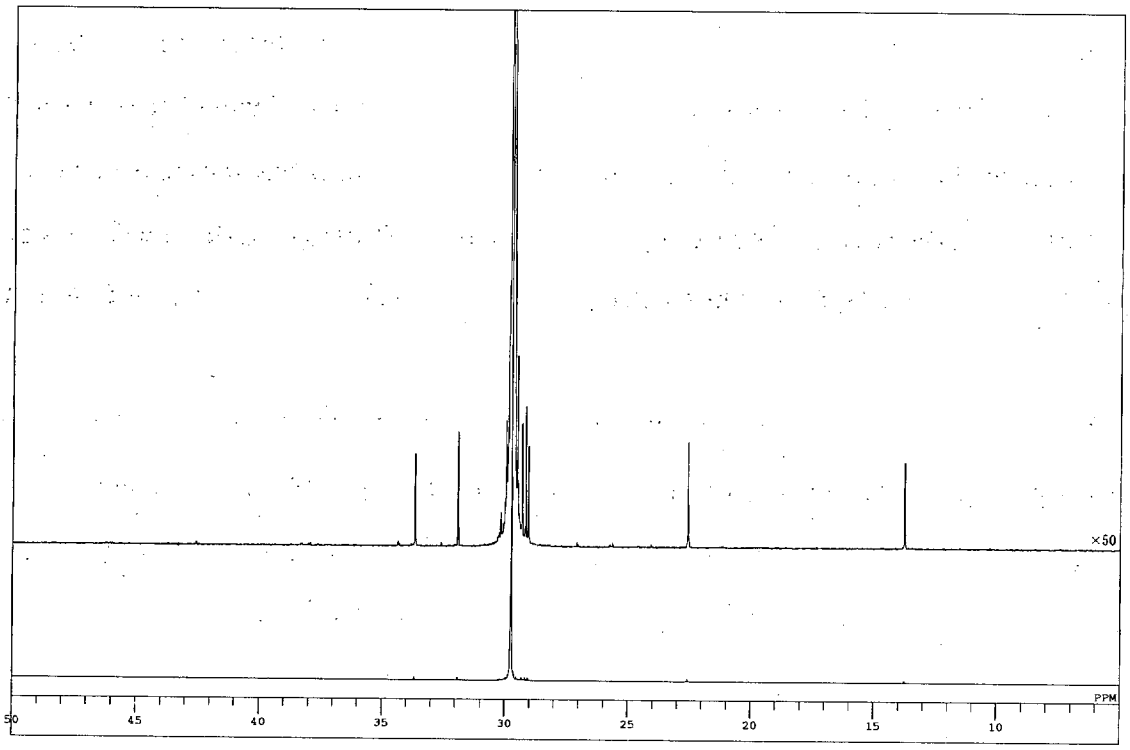

Figure 1. ^{13}C-NMR spectra of polyethylene produced by complex **1** / MAO

[Solvent: *o*-dichlorobenzene]