Electric Supplementary Information for

Norbornadiene homopolymerization and norbornene/norbornadiene/1-octene terpolymerization by *ansa*-fluorenylamidotitanium-based catalysts

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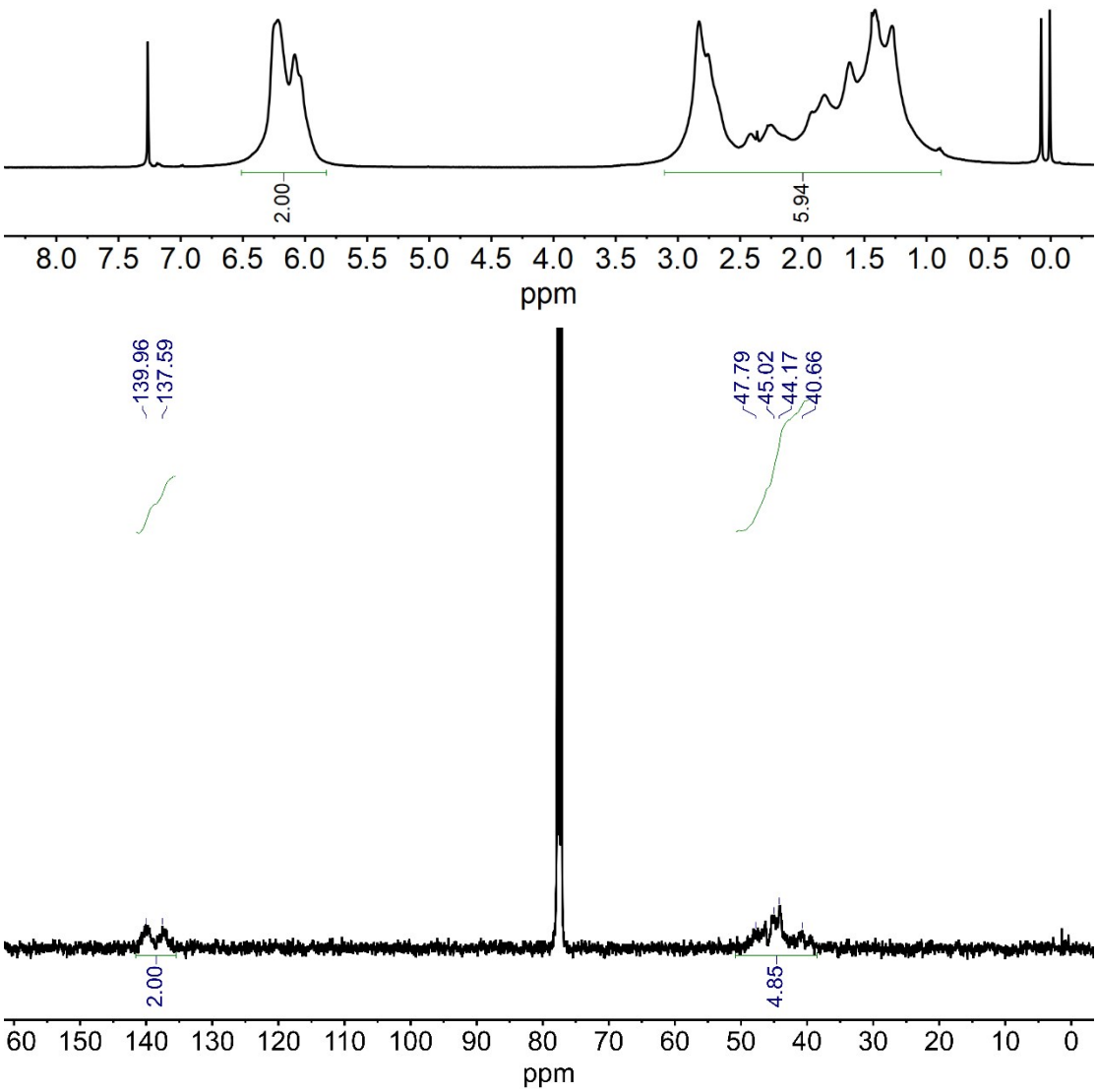

Figure S1 ^{1}H and ^{13}C NMR spectra of polyNBD obtained by **2**–$[Ph_3C][B(C_6F_5)_4]$ (Run 11, Table 1).

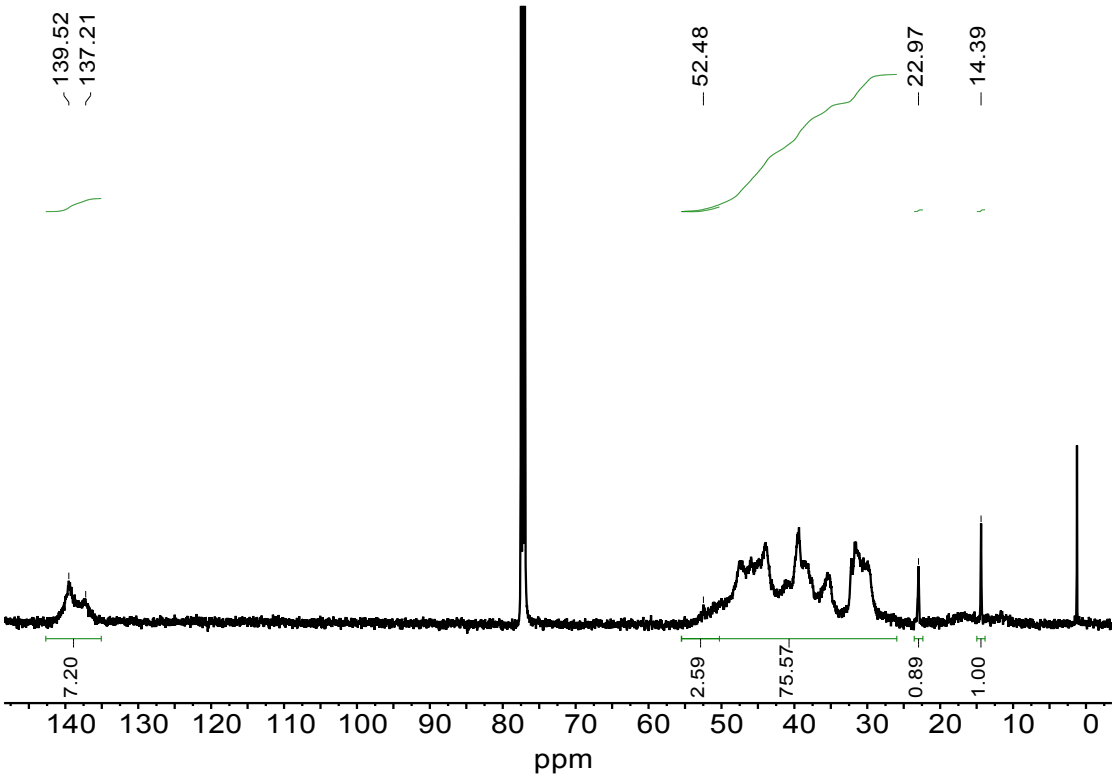

Figure S2 ^{13}C NMR spectrum of poly(NB/NBD/OC) obtained by **1**–MMAO in 5 min (Run 7, Table 2).

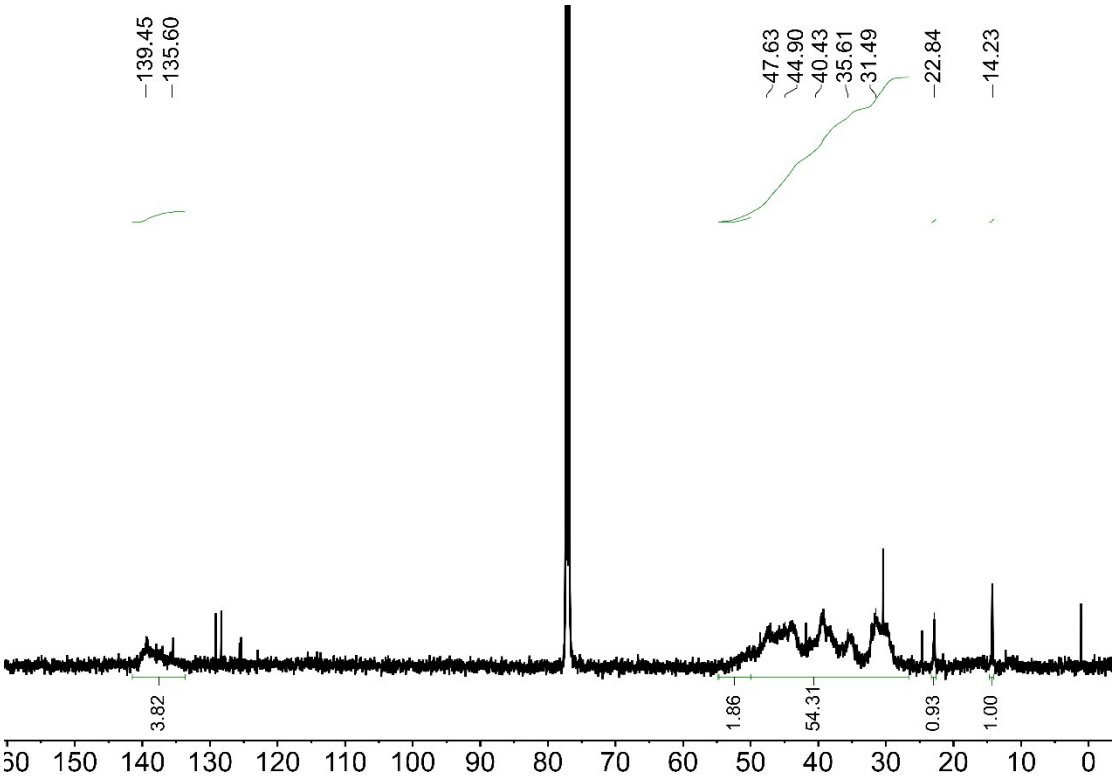

Figure S3 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **1**–MMAO in 10 min (Run 1, Table 2).

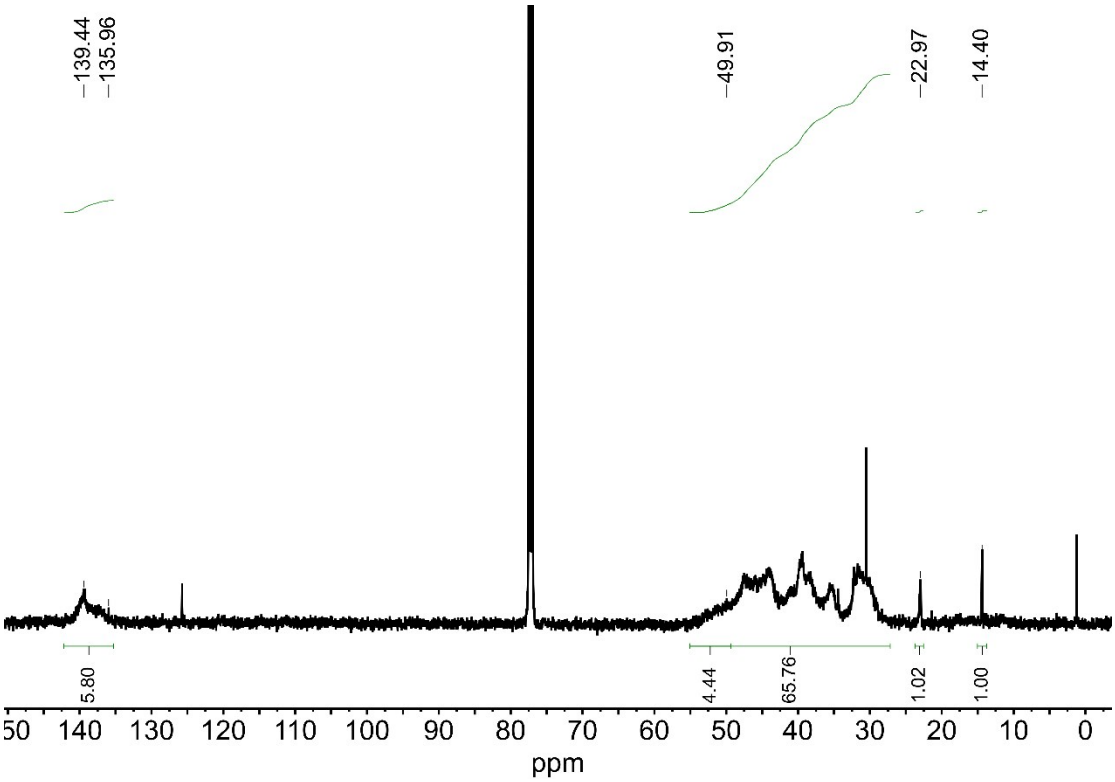

Figure S4 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **1**–MMAO in 60 min (Run 8, Table 2).

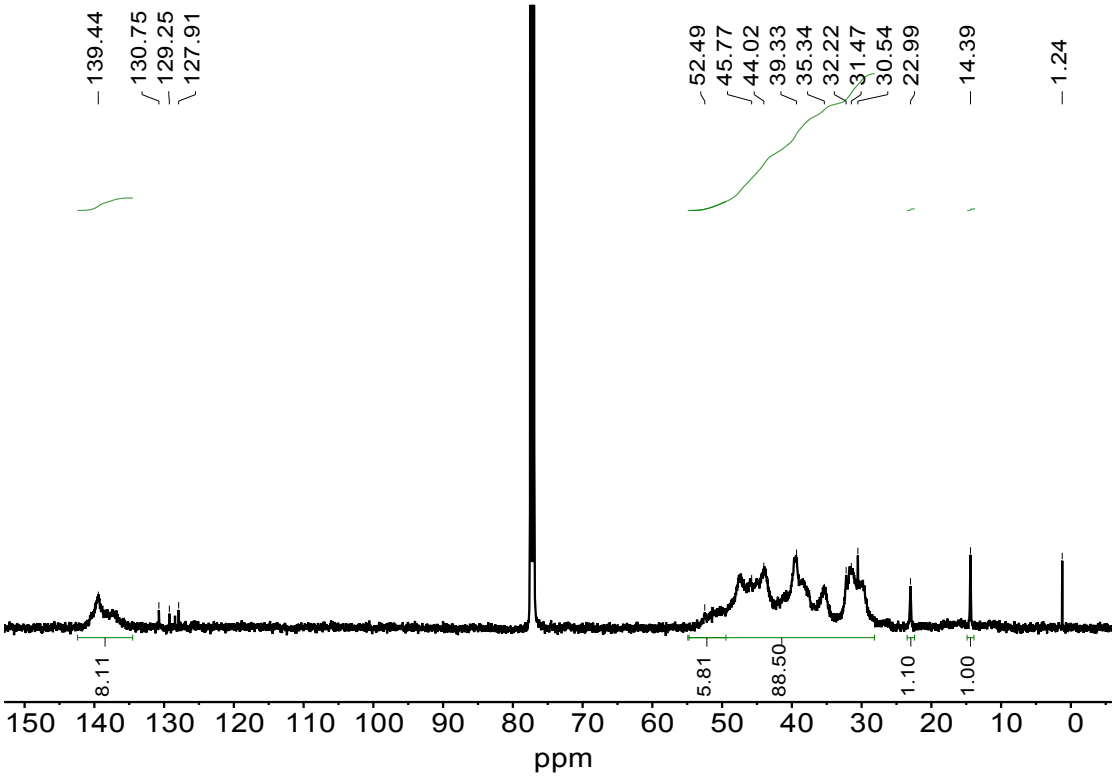

Figure S5 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **1**–MMAO in 120 min (Run 9, Table 2).

I didn't put NMR spectrum of Run 2, Table 3 because it is calculated by solid-state NMR and cannot show the integral clearly. The ^{13}C NMR spectrum of terpolymer at different times is also not shown, because the spectrum is not very good.

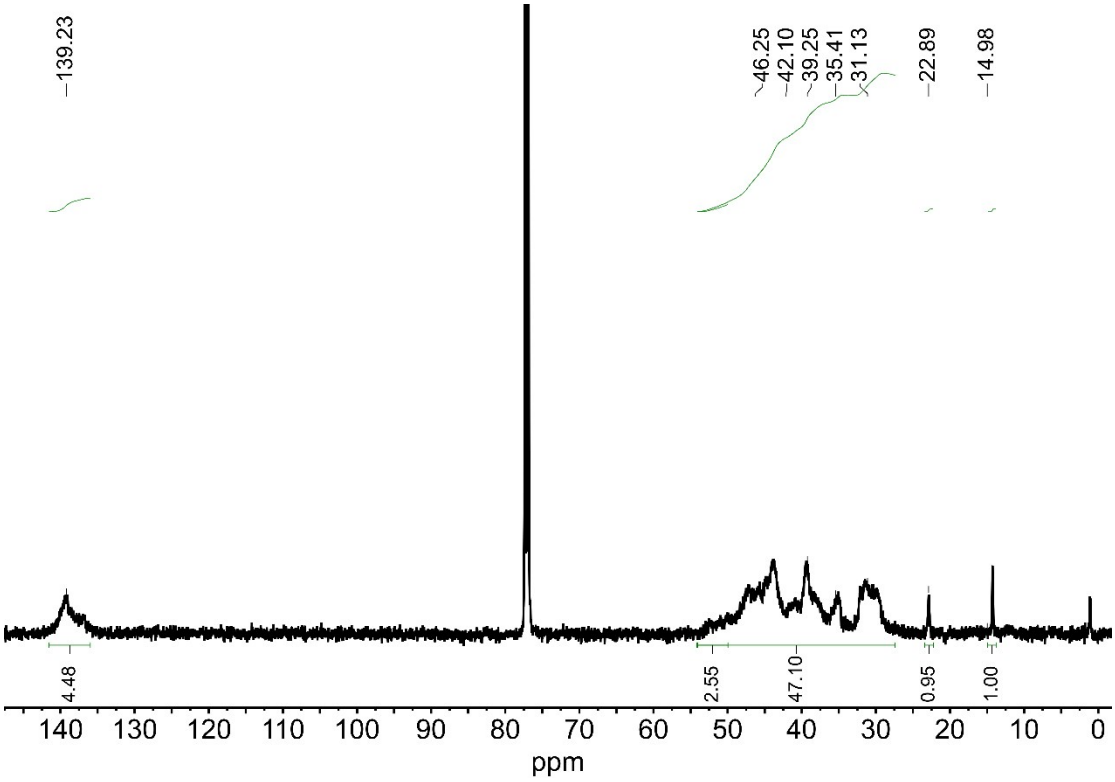

Figure S6 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **1**–$[Ph_3C][B(C_6F_5)_4]$ at 25 ºC (Run 1, Table 3).

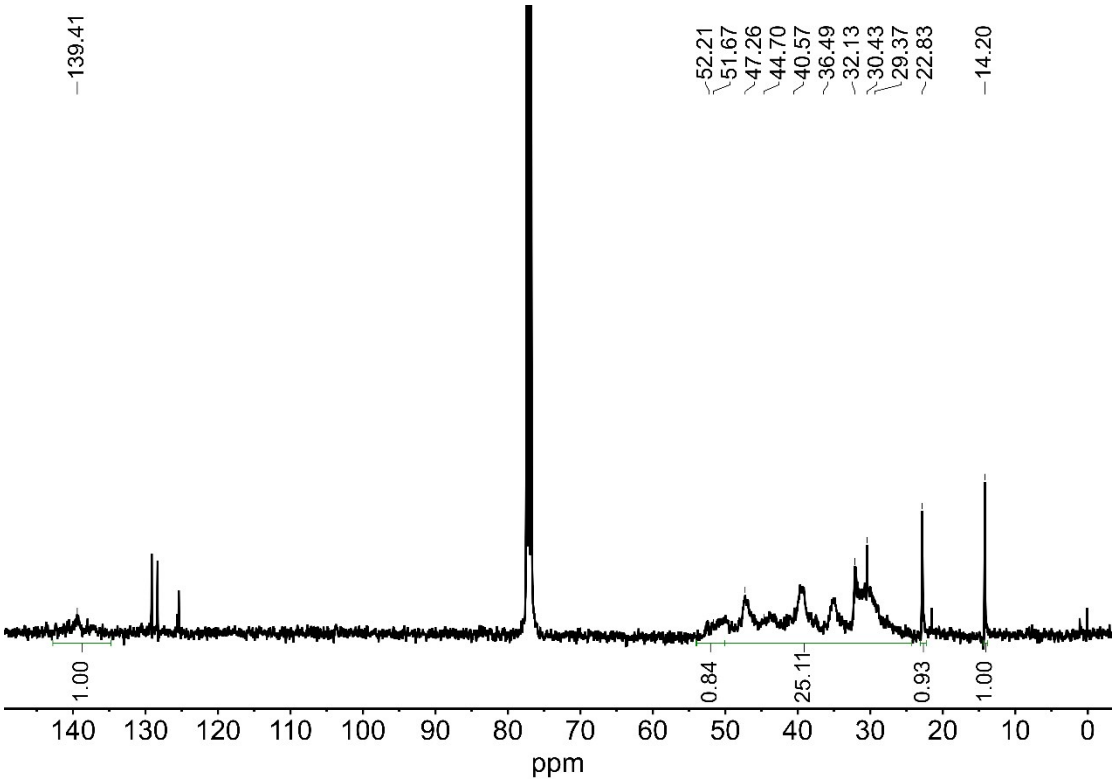

Figure S7 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **2**–

$[Ph_3C][B(C_6F_5)_4]$ at 0 ºC (Run 3, Table 3).

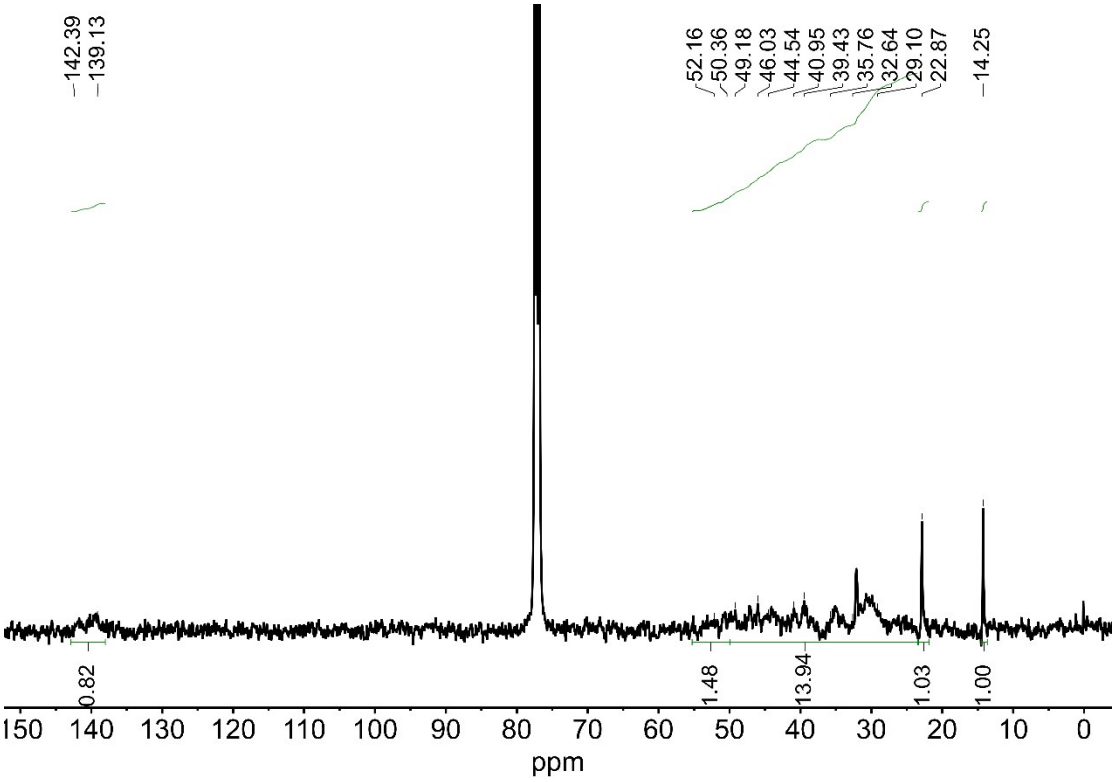

Figure S8 ^{13}C NMR spectrum of terpoly(NB/NBD/OC) obtained by **2**–$[Ph_3C][B(C_6F_5)_4]$ in the ratio of 4.4/1.2/4.4 at 0 ºC (Run 6, Table 3).

Table S1 Conversions of comonomers in each catalytic system [a]

Run	Cat.	Co-cat. [b]	Total conv. (%)	Content [c] NB/NBD/OC (mol %)	Conv. [d] NB/NBD/OC (%)
1 in Table 2	**1**	MMAO	21	65/24/11	21/31/12
12 in Table 2	**2**	MMAO	39	64/24/12	39/58/24
1 in Table 3	**1**	Borate	11	57/30/13	10/20/7.4
2 in Table 3	**2**	Borate	56	60/22/18	52/76/52

[a] NB/NBD/OC feed ratio = 66/17/17 (mol %). [b] Borate = $[Ph_3C][B(C_6F_5)_4]$.
[c] Comonomer contents. [d] Conversion of each comonomer calculated from the polymer mass and the comonomer contents.