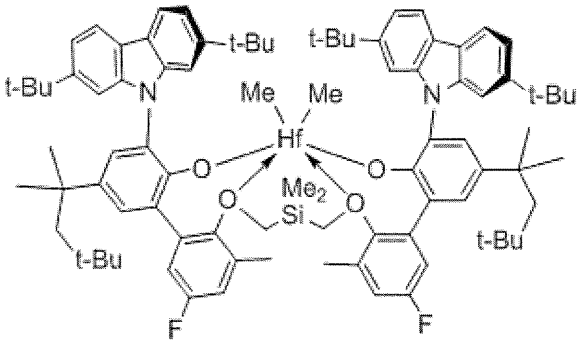
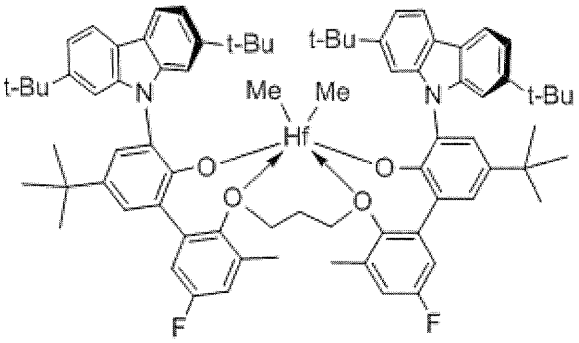
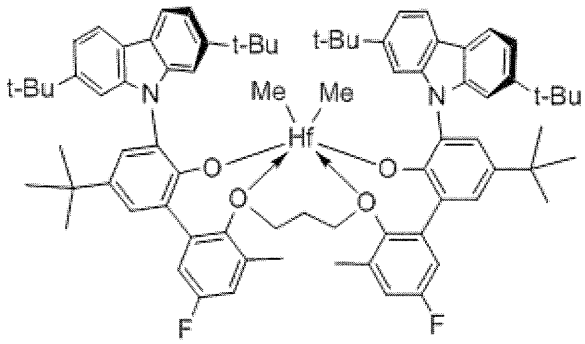
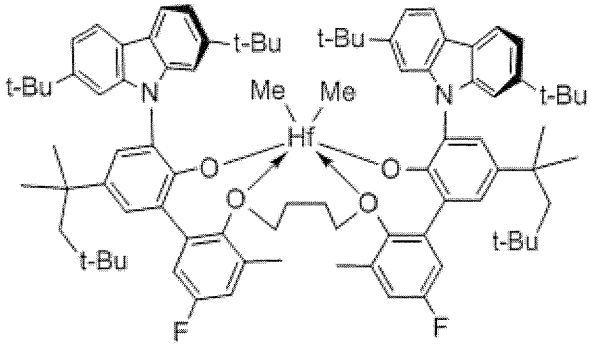
We Claim:

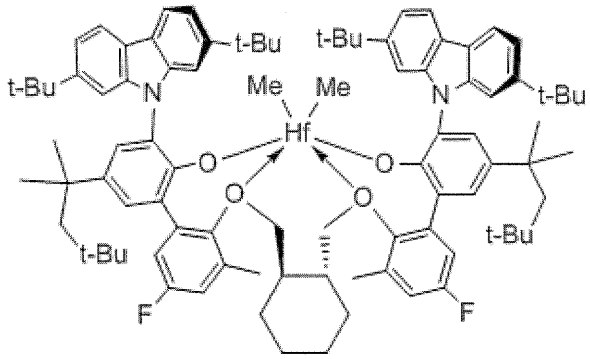
1. A polymerization process for producing ethylene based polymers comprising:
polymerizing ethylene and optionally one or more α-olefins in the presence of one or more first catalyst systems and optionally one or more second catalyst systems in a single reactor, wherein first catalyst system comprises;
(a) one or more procatalysts comprising a metal-ligand complex selected from the group consisting of:

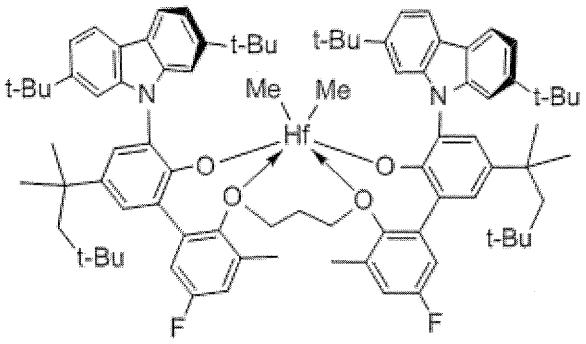


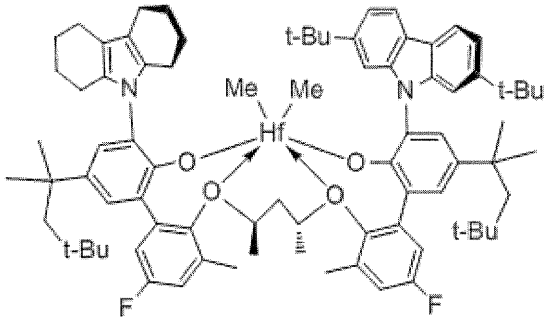


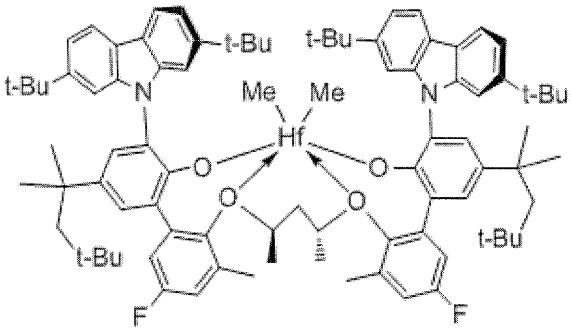




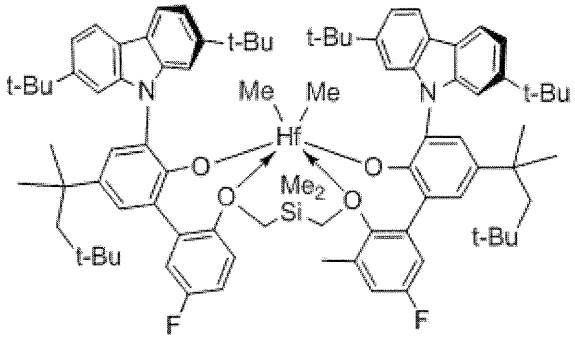
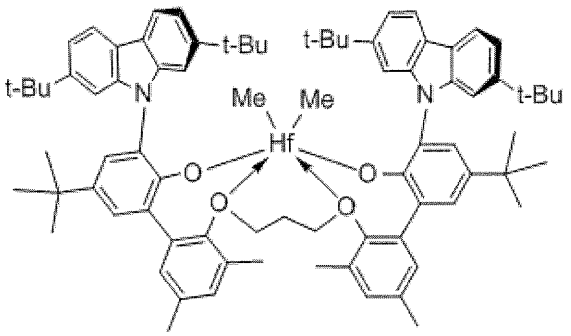
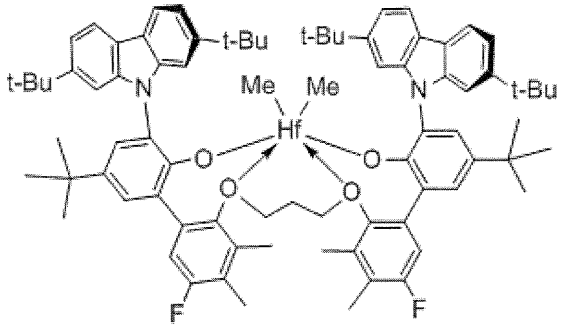
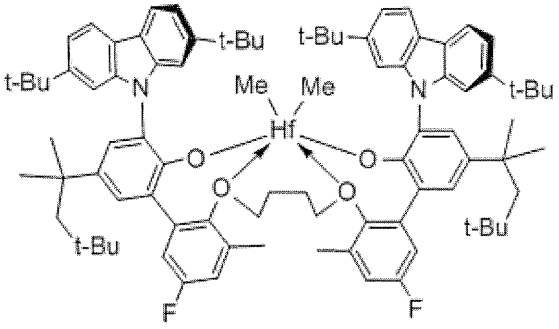
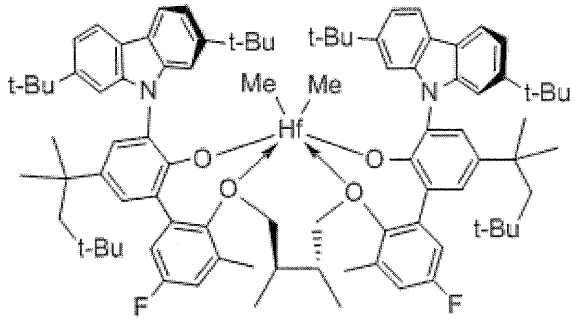
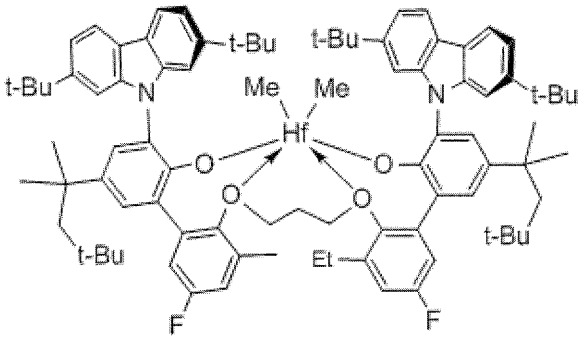
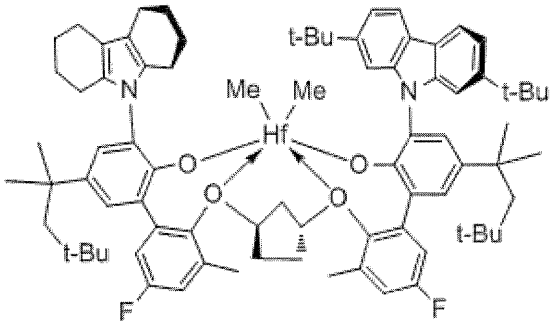
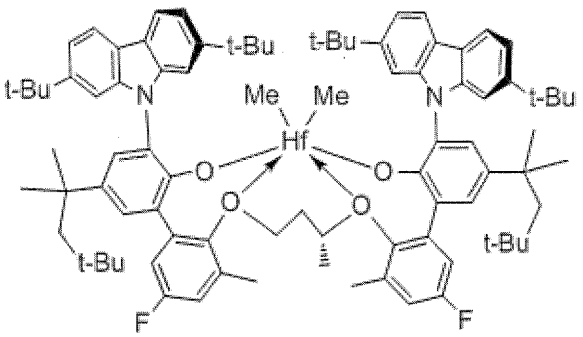




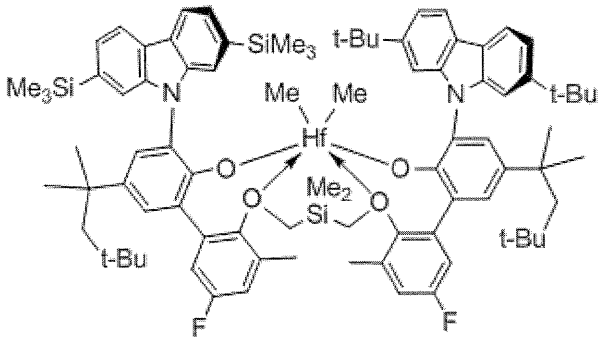
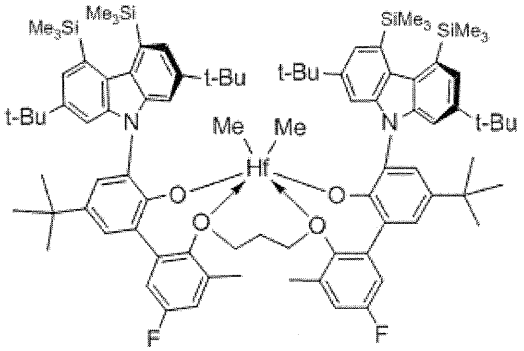
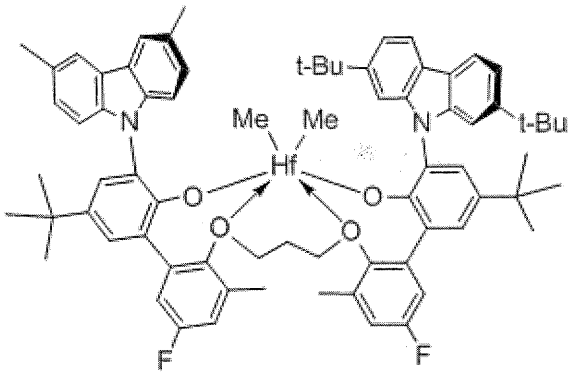
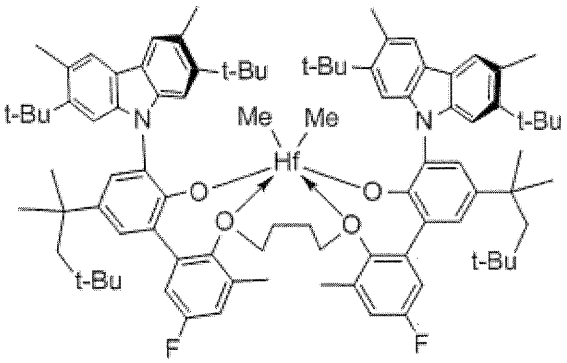
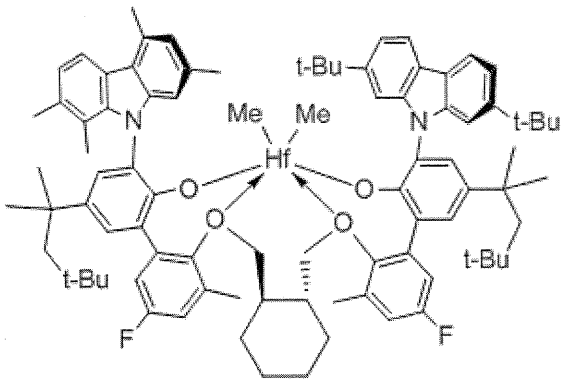
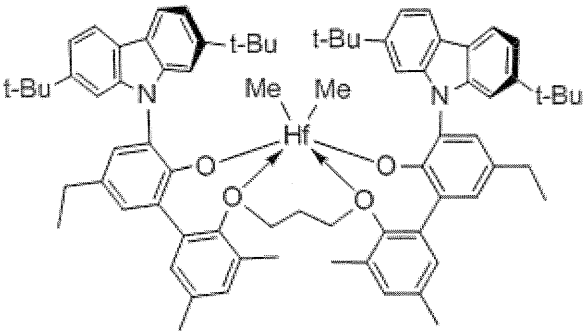
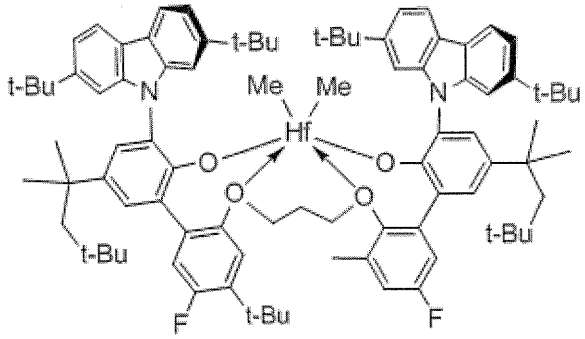
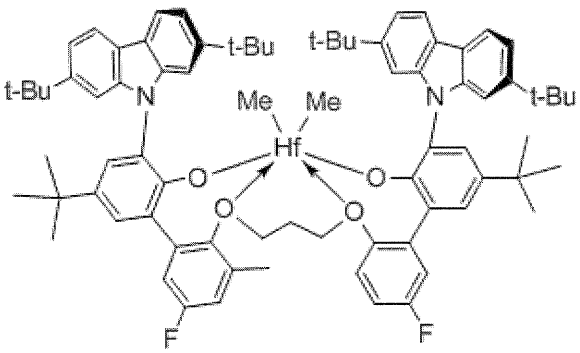


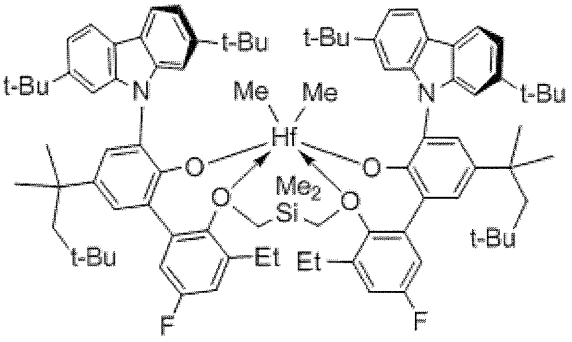


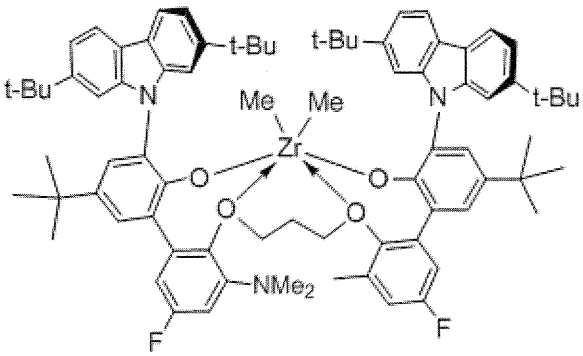
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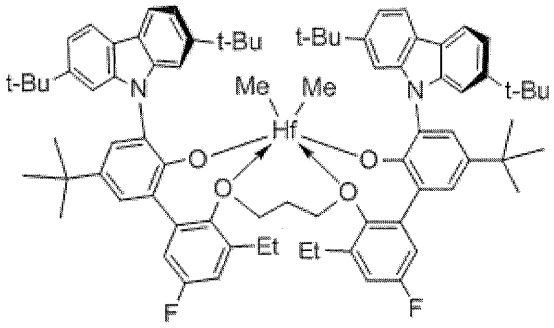









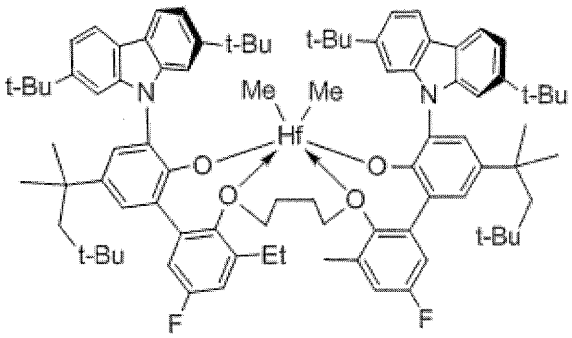
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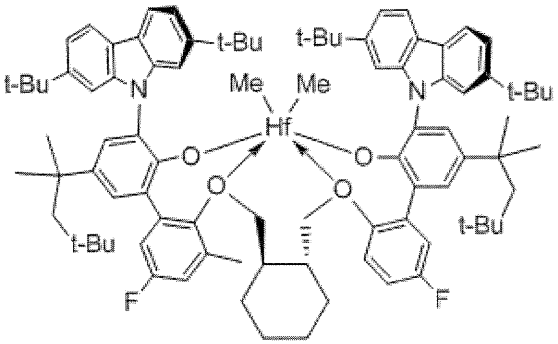









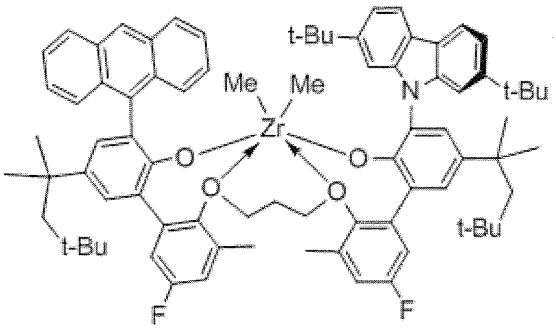

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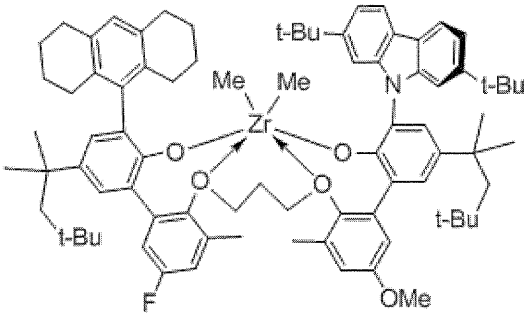

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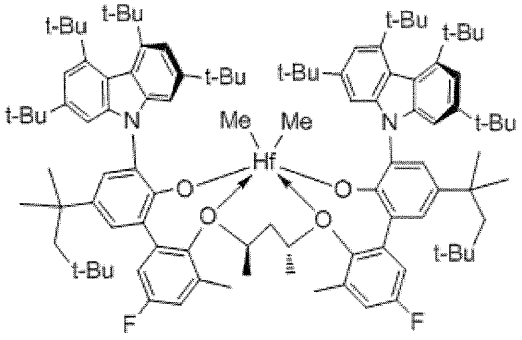

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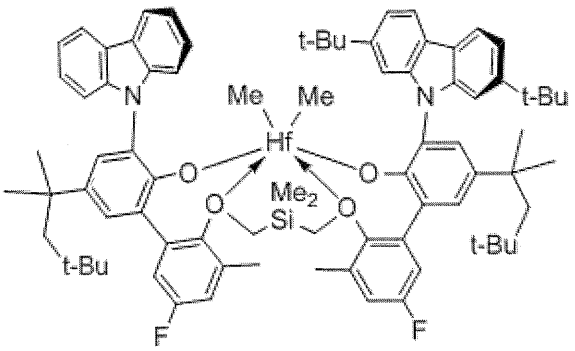

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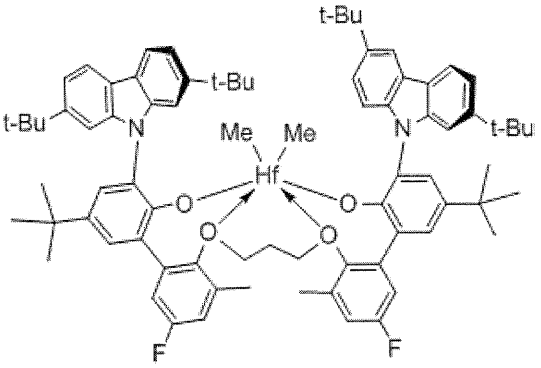

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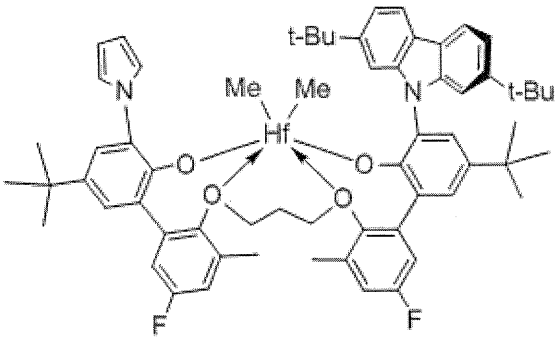

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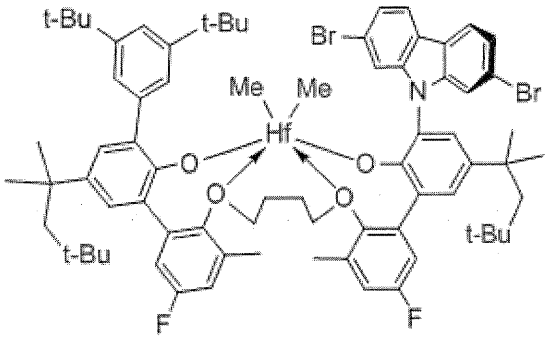

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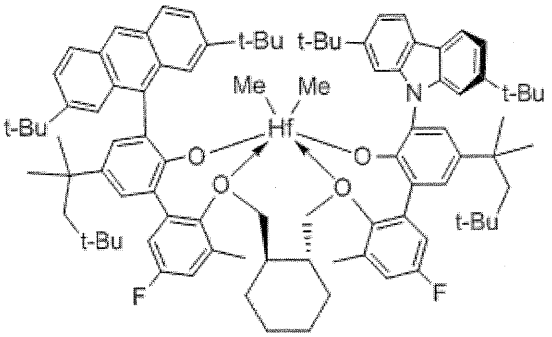

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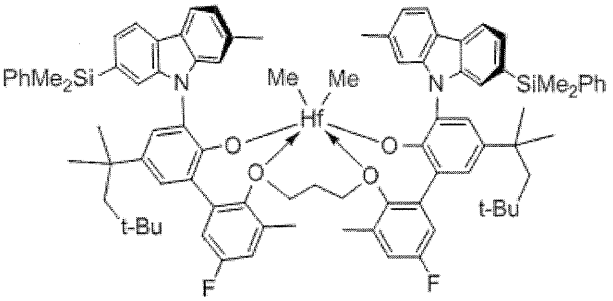


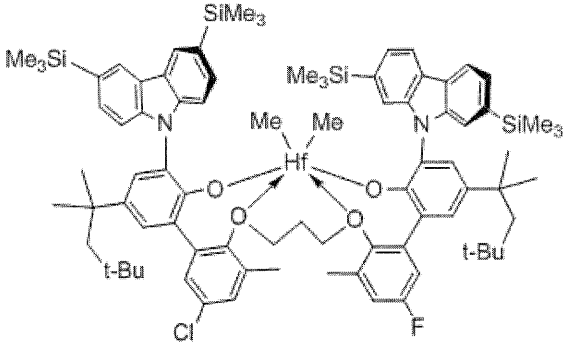


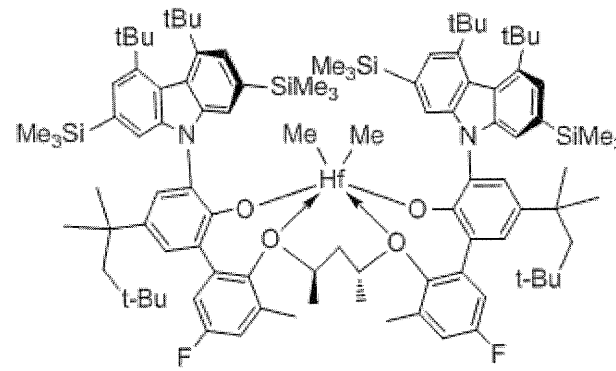


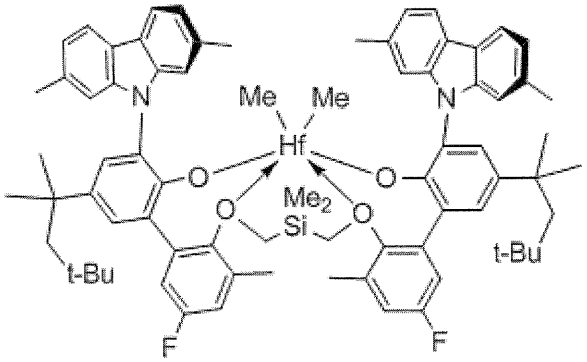


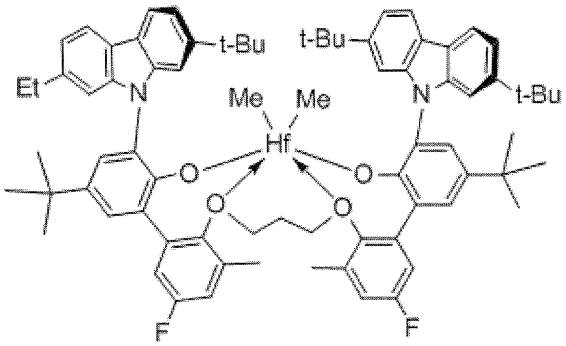


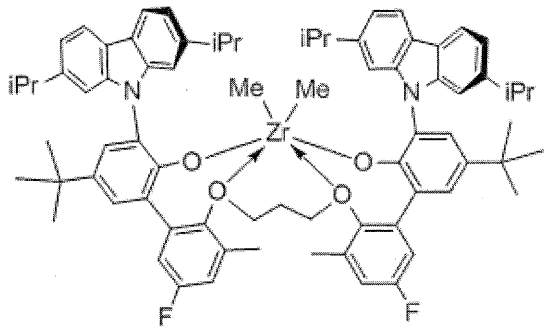


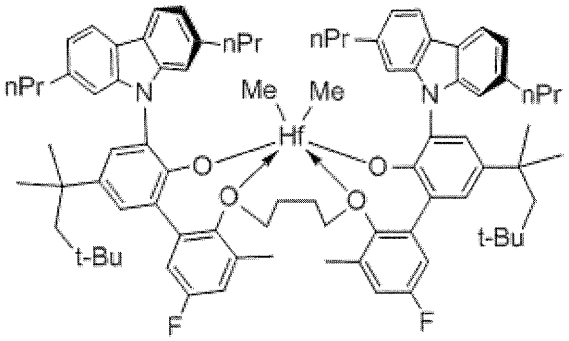


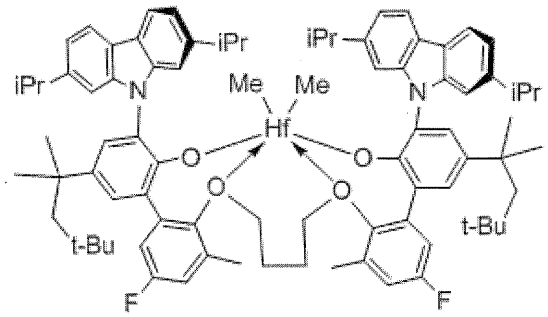


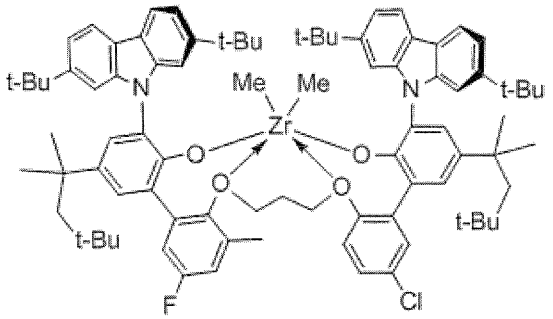

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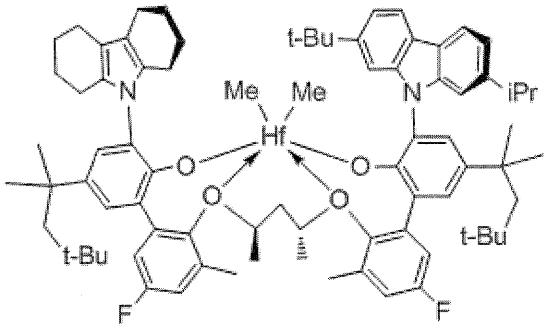

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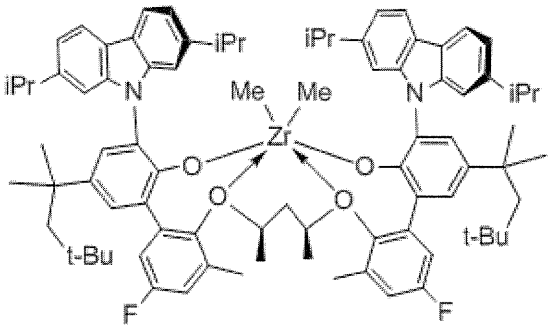

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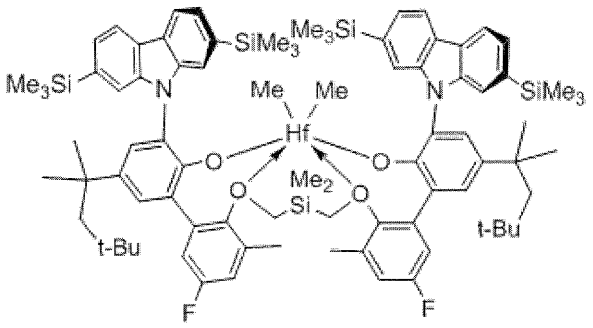

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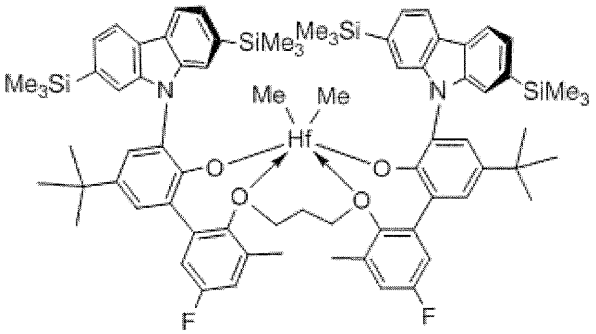

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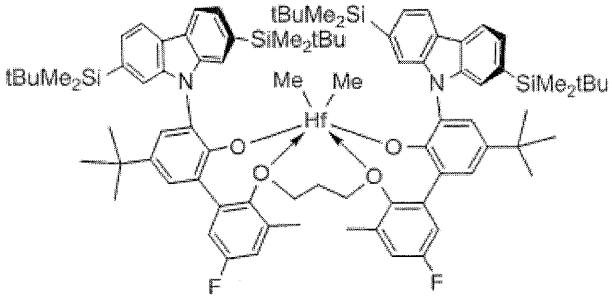

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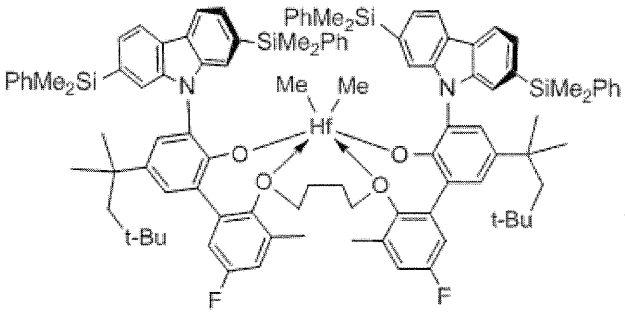

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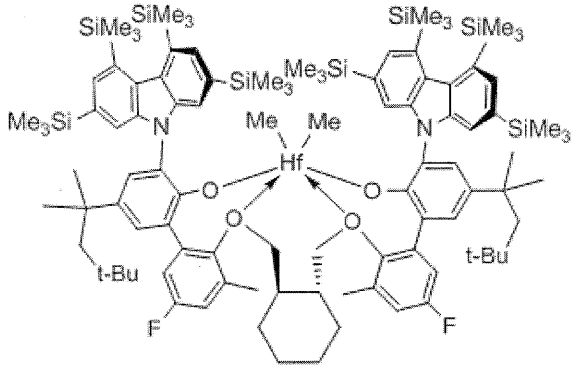

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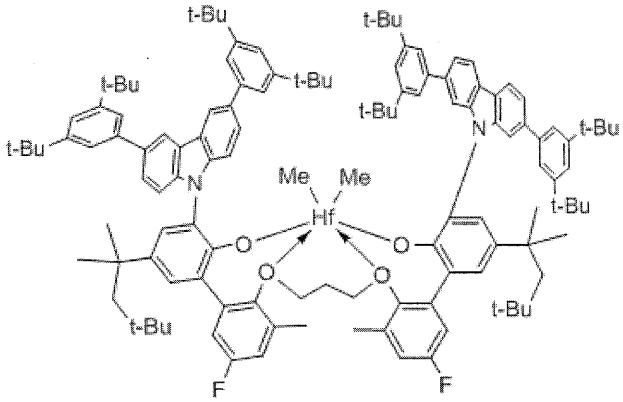


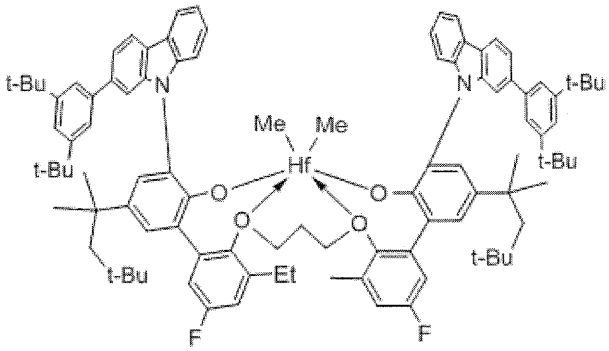


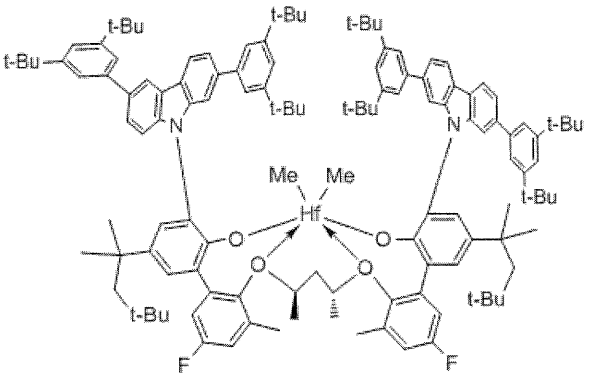


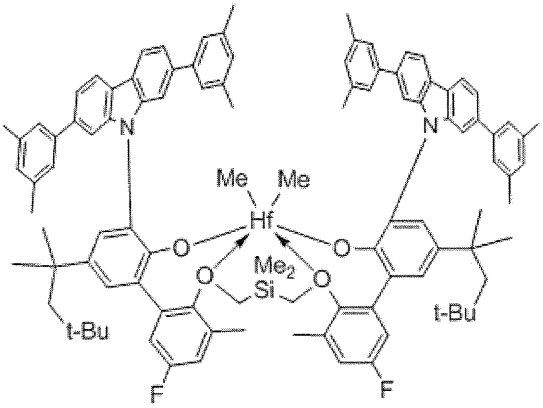


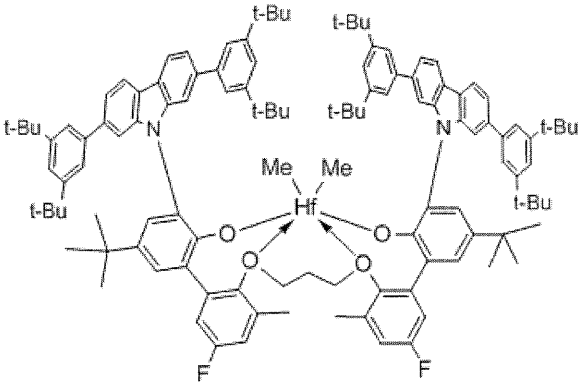


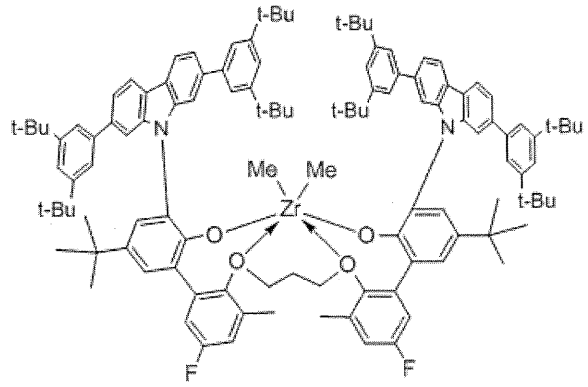


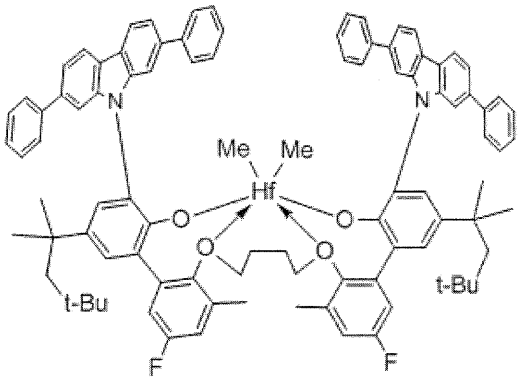


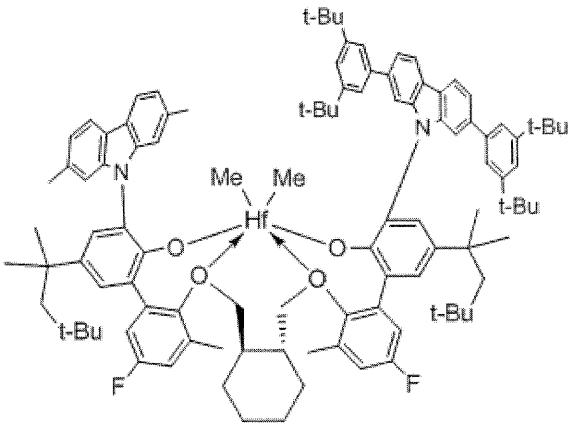


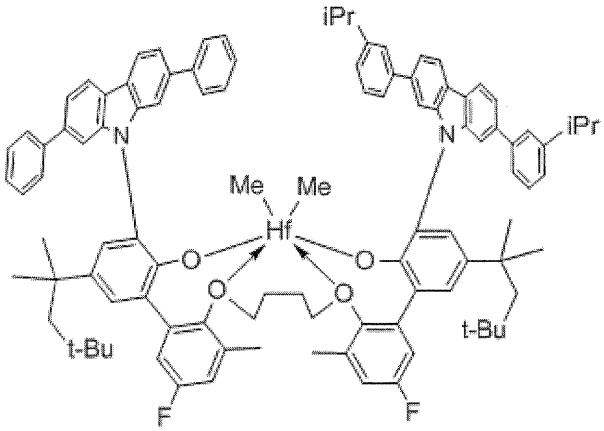

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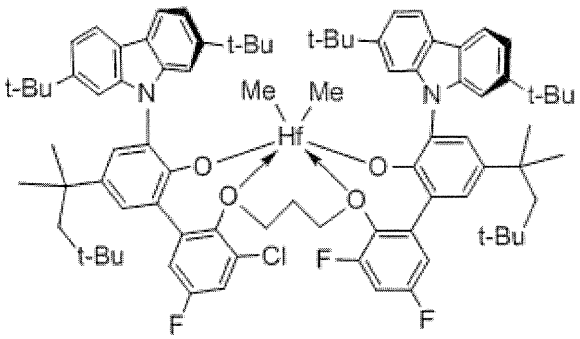

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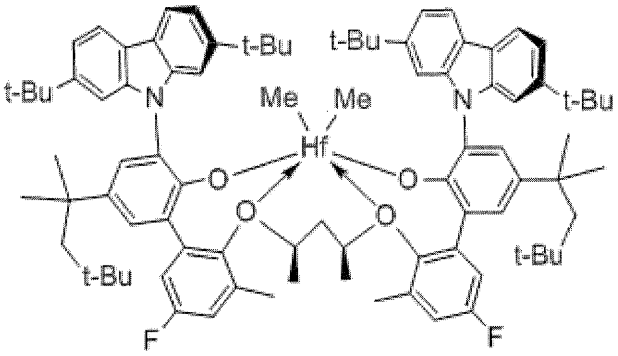

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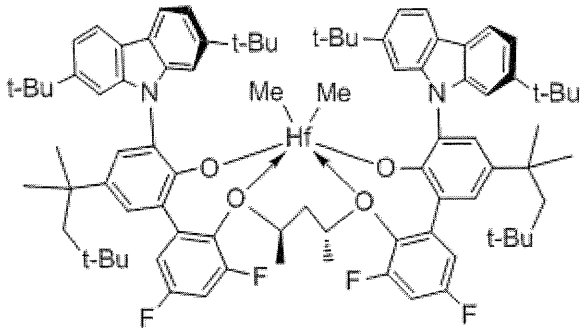

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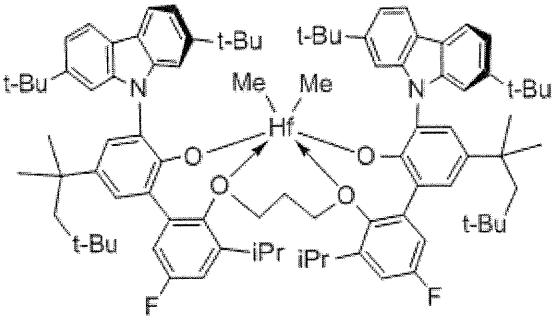

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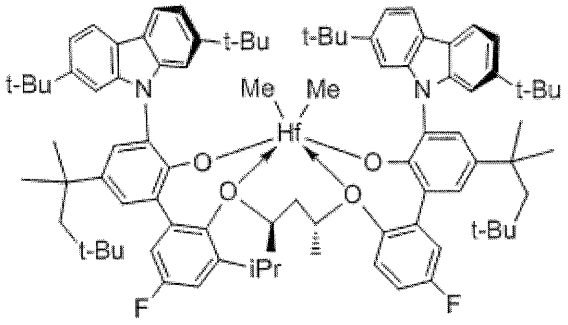

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t-Bu
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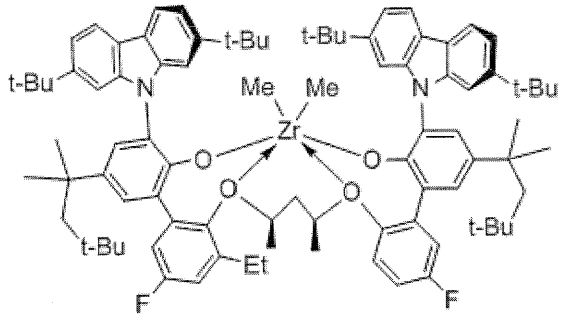

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and

(b) one or more cocatalysts; wherein the ratio of total number of moles of the one or more metal-ligand complexes to total number of moles of the one or more cocatalysts is from 1:10,000 to 100:1.

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