

FIG. 1

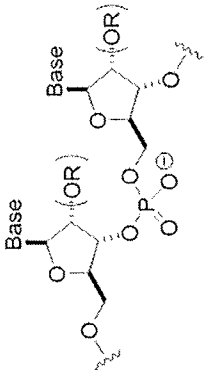
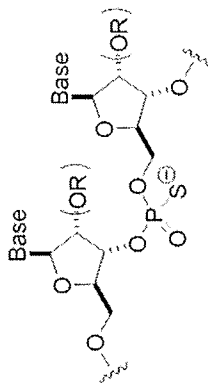
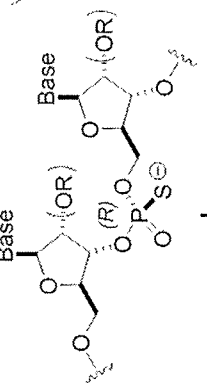
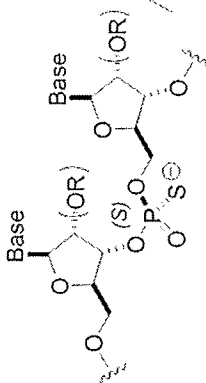
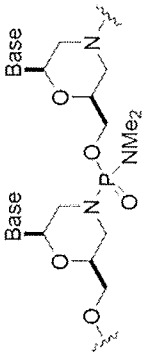
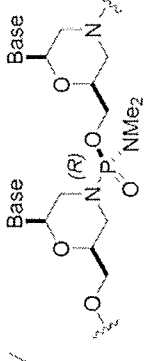
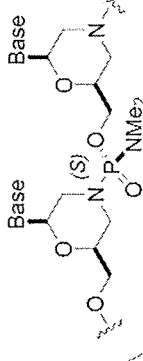
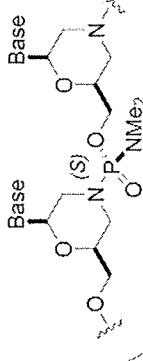
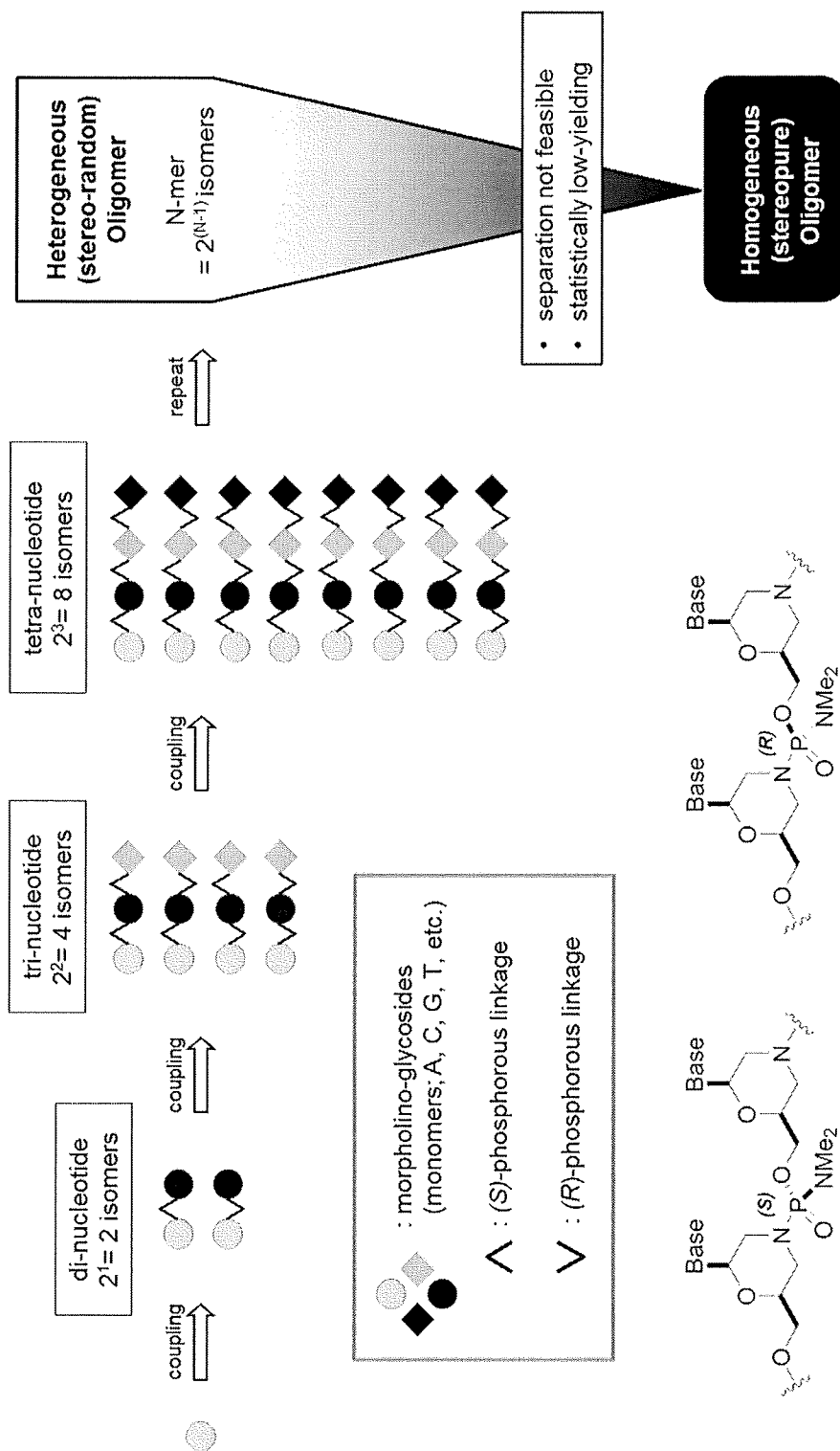
Therapeutic Oligonucleotides		
Phosphodiester Oligomers (DNA, RNA, etc.)	Phosphorothioate (PS) Oligomers	Phosphorodiamidate Morpholino Oligomers (PMOs)
	  $=$ 	  $+$  $=$ 
	achiral phosphorous	chiral phosphorous

FIG. 2

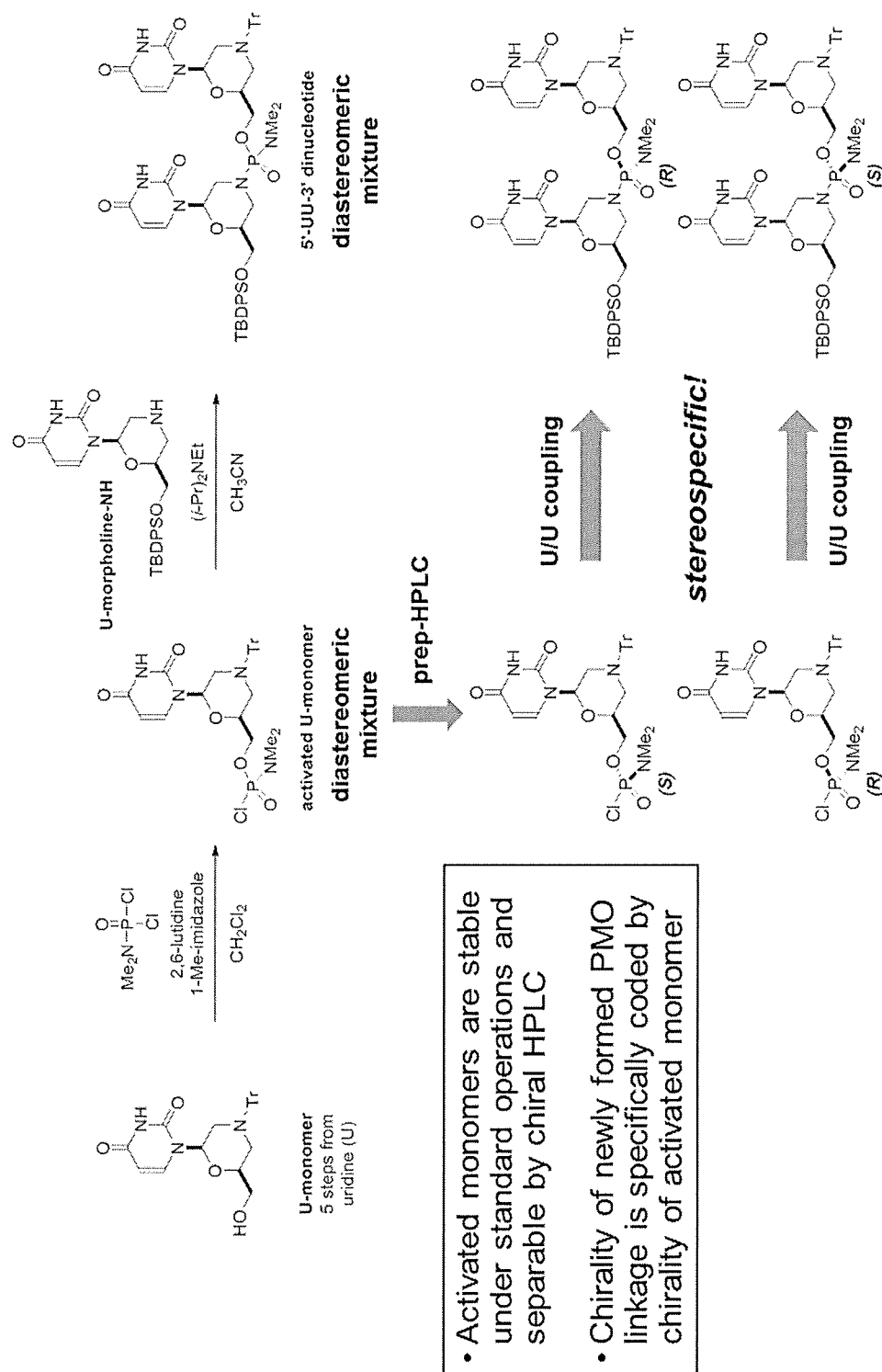
Challenges in Access to Homogeneous (Stereopure) PMOs



3/11

FIG. 3

Resolution of Diastereomers of Activated Monomers and Stereospecific PMO Coupling



4/11

FIG. 4A

Ten Key "Reagents" to Construct Homogeneous Oligomers

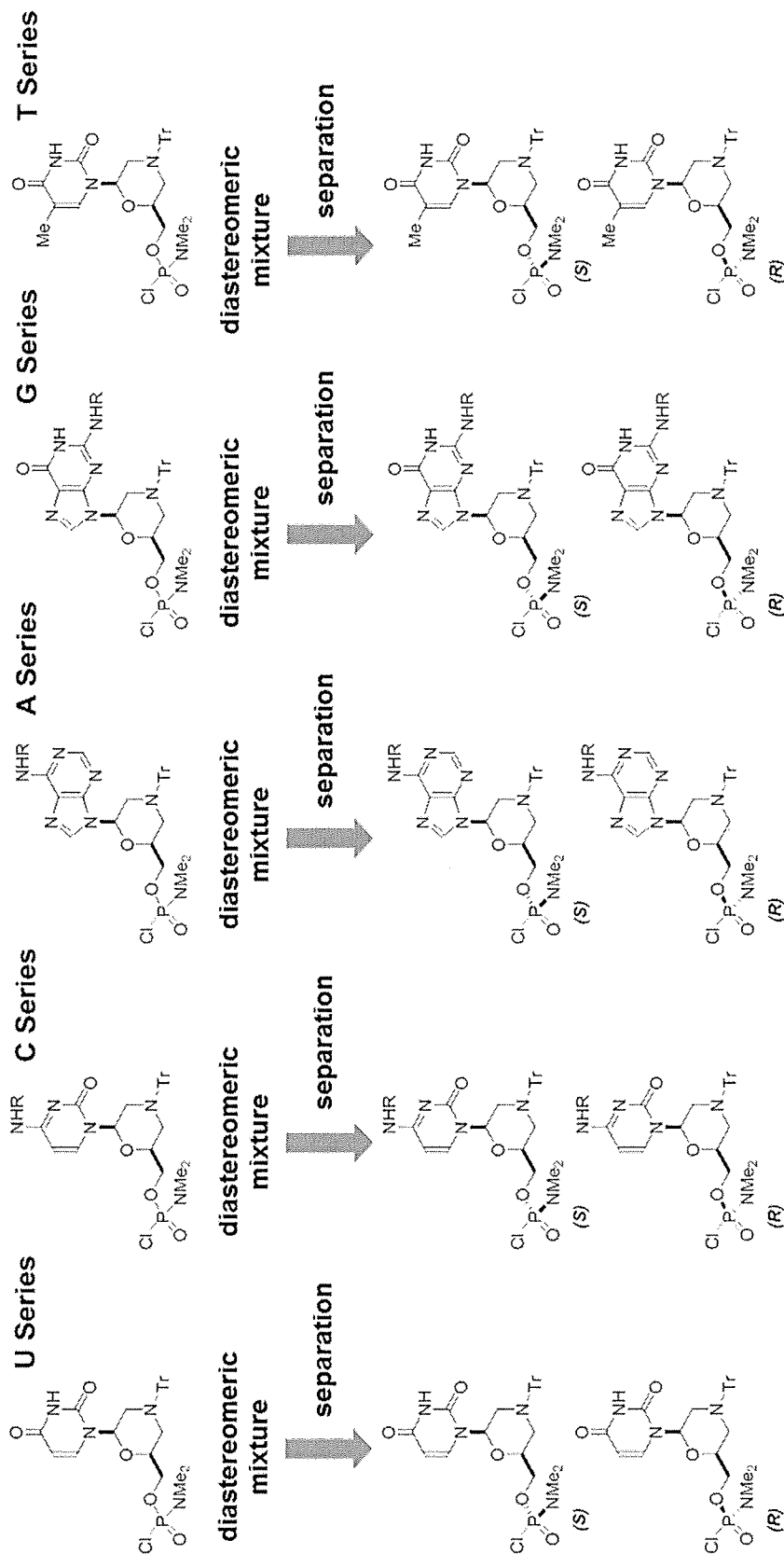


FIG. 4B

Ten Key "Reagents" to Construct Homogeneous Oligomers

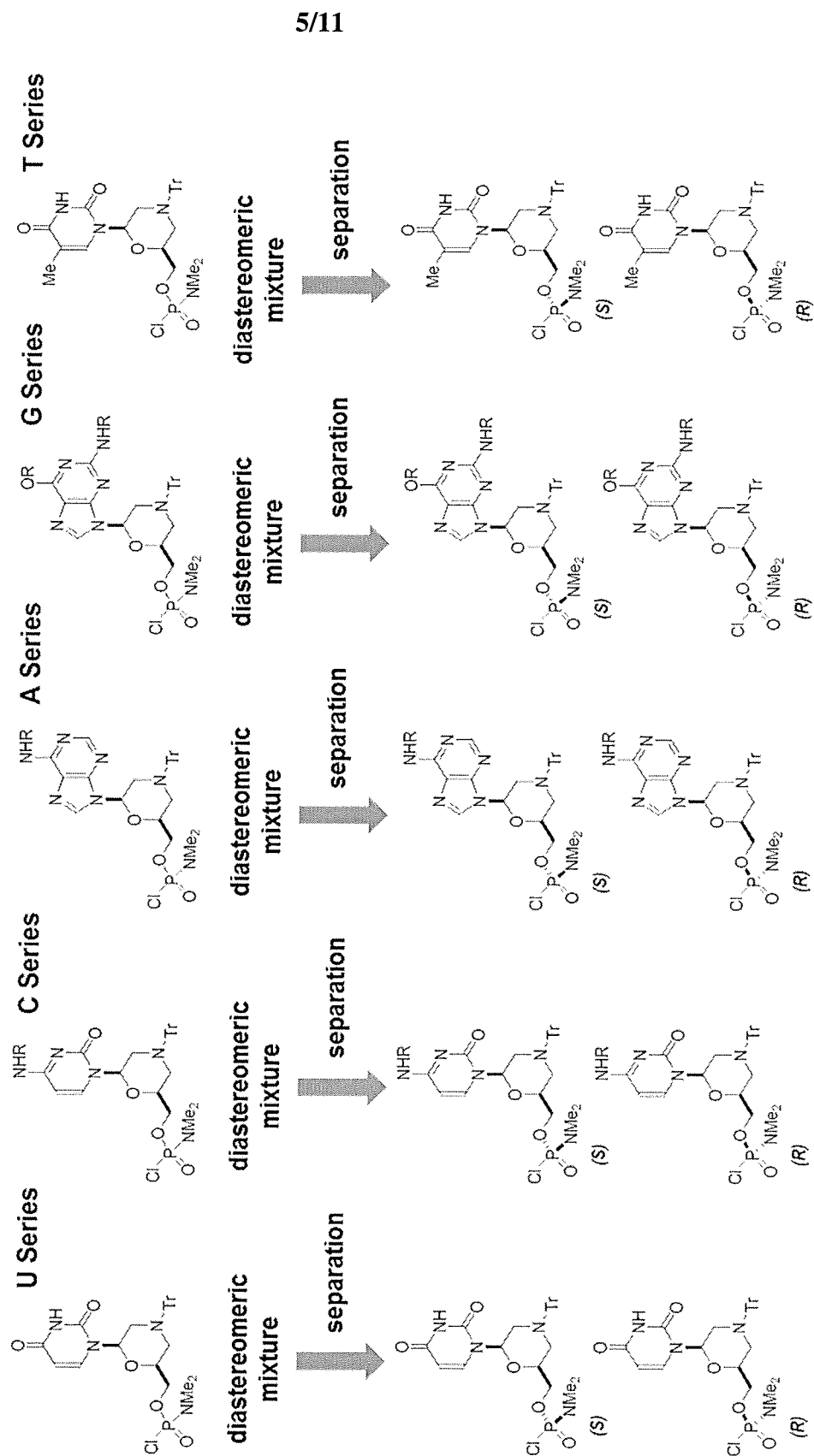


FIG. 5

New Method Provides Direct Access to Stereopure (Homogeneous) PMOs

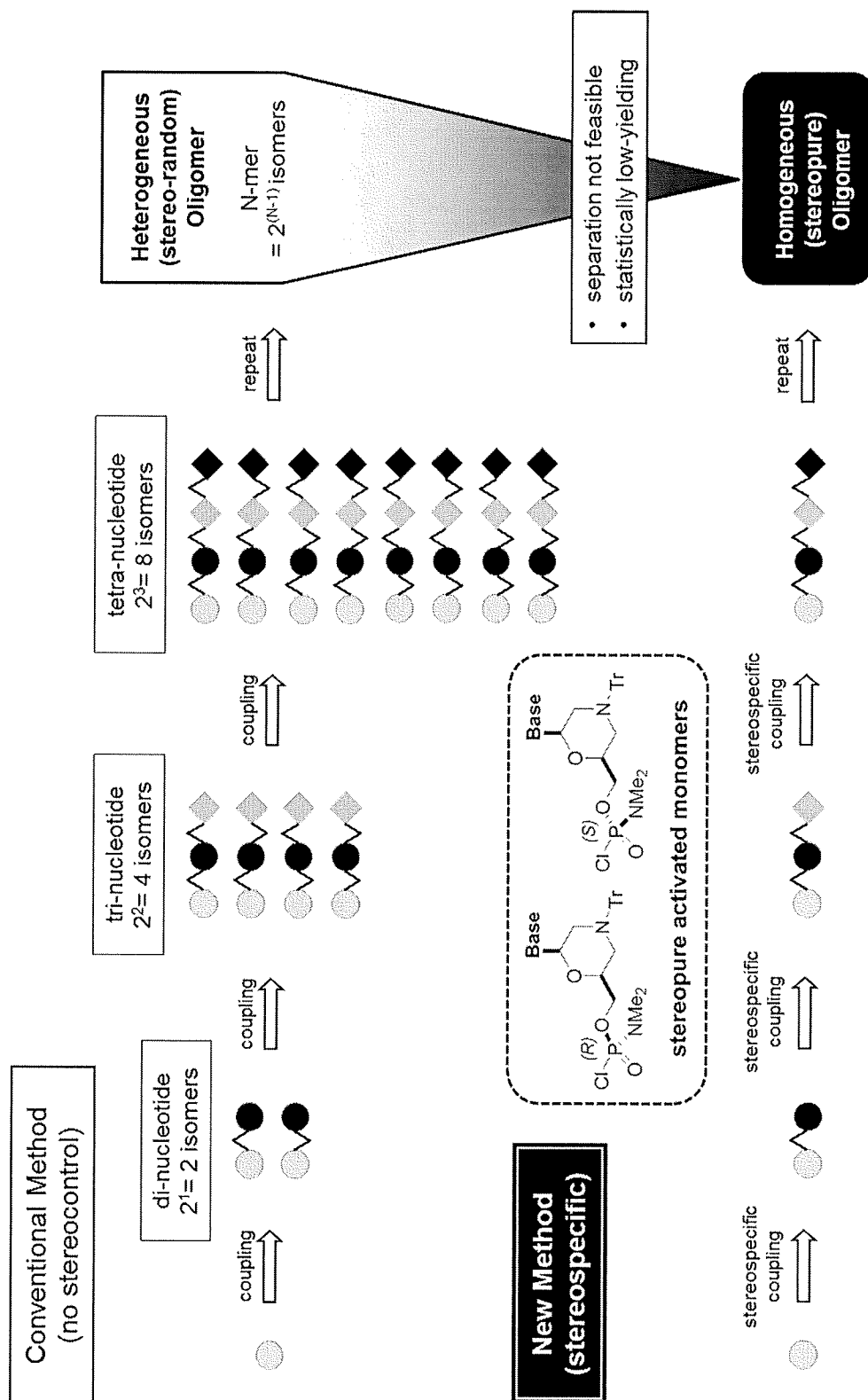


FIG. 6

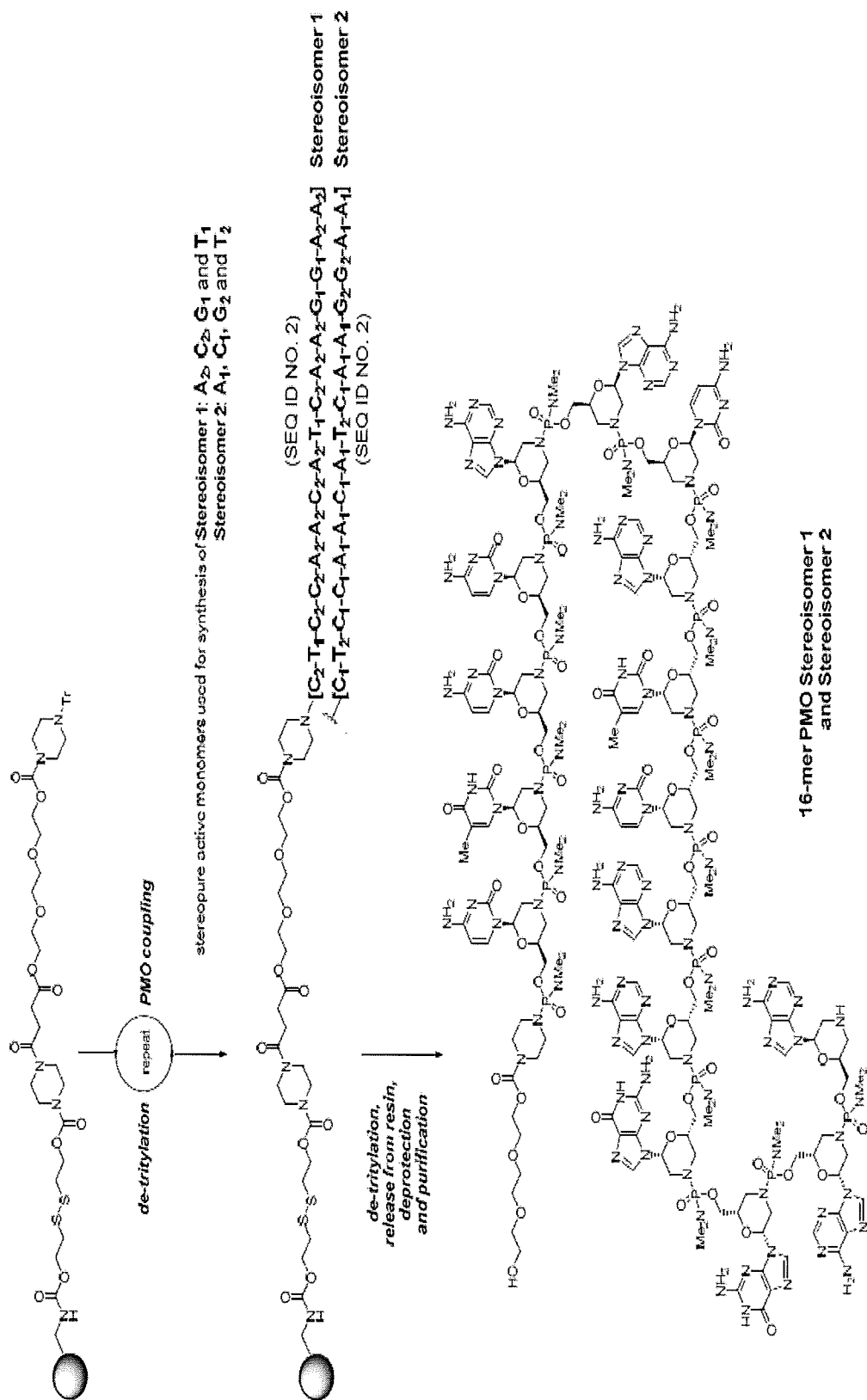
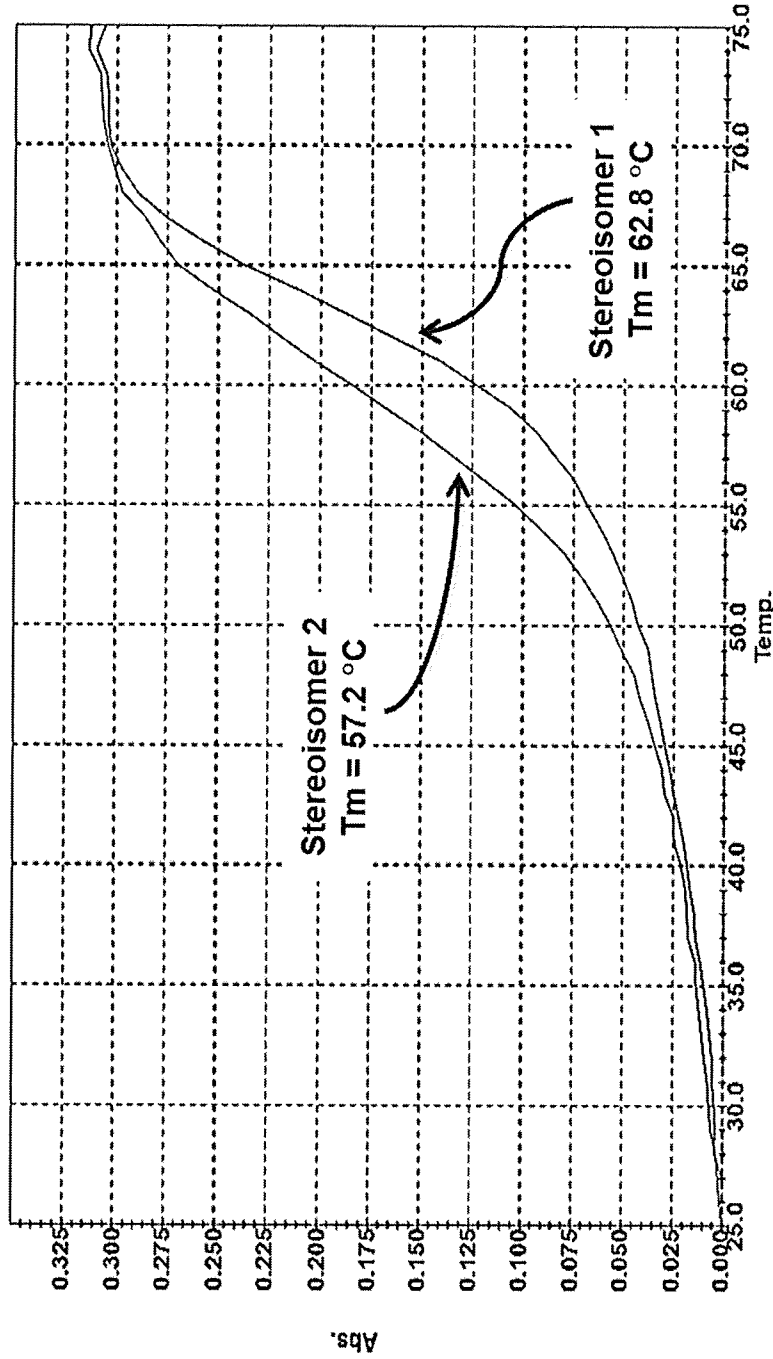
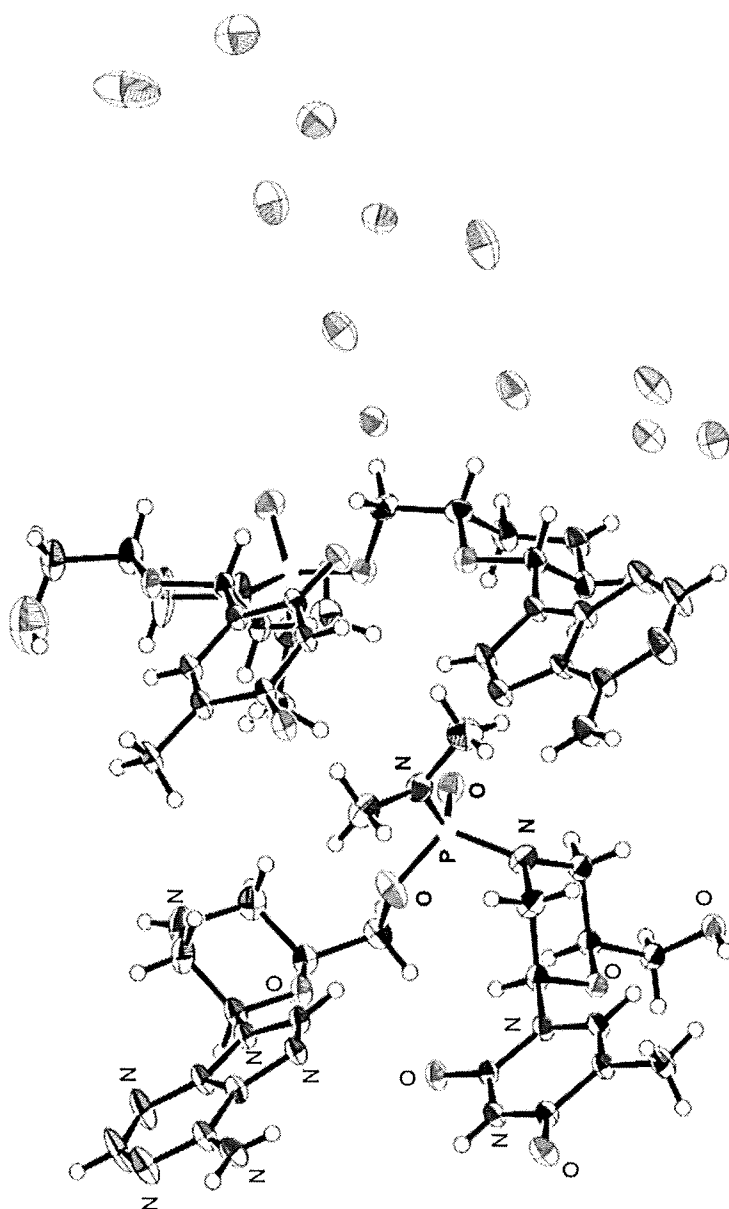


FIG. 7



9/11

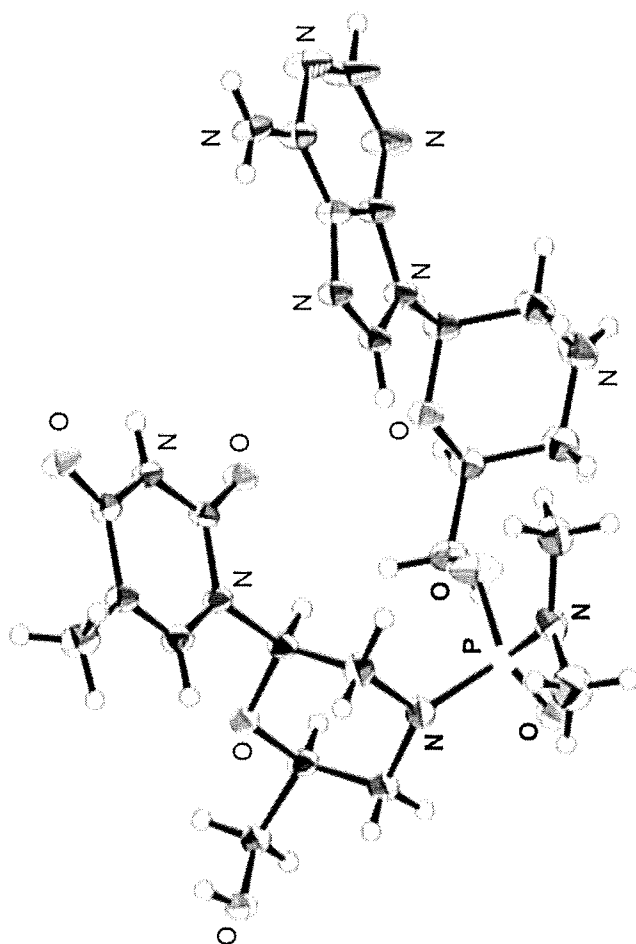
FIG. 8



10/11

FIG. 9A

Fragment 1



11/11

FIG. 9B

Fragment 2

